CONFERENCE OF MINISTERS

ON

AGRICULTURAL MARKETING

NOVEMBER 1938.

RESUME OF DISCUSSIONS



NEW DELHI PRINTED BY THE MANAGER
GOVERNMENT OF INDIA PRESS: 1939.

CONFERENCE OF MINISTERS ON AGRICULTURAL MARKETING

DELHI—NOVEMBER 1938

Resume of proceedings and resolutions adopted

I—INTRODUCTORY

At the Provincial Economic Conference 1934 there was general agreement that of all practical measures for improving economic conditions, an intensive programme to develop marketing facilities for farm products offered the best immediate prospects of substantial results Accordingly the Government of India embarked early in 1935 upon a comprehensive scheme for the improvement of agricultural marketing in India for a period of five years and the Provinces and 220 Indian States co operated in carrying out marketing surveys throughout India As a result of these surveys, undertaken with the aid of grants from the Central Government and the Imperial Council of Agricultural Research a number of practical experiments in grading were carried out and central legislation *viz* the Agricultural Produce (Grading and Marking) Act was enacted in 1937 with a view to prescribing standards of quality and safeguarding grade marks

2 Subsequently the necessity for the examination of the whole question of the future development of agricultural marketing work and of the best method to be adopted for co ordinating the marketing work in India with production was discussed at a meeting of the Governing Body of the Imperial Council of Agricultural Research held at Simla in July 1938 when a general feeling was expressed that the whole matter should be considered by a special conference to be convened for the purpose

3 Steps were accordingly taken by the Imperial Council of Agricultural Research to hold a conference of the Hon ble Ministers in charge of Agriculture in the Provinces and of similar representatives of Indian States Invitations were also extended to other Provincial Ministers interested in rural development The Conference was held in New Delhi on the 29th and 30th November 1938 and His Excellency the Viceroy was graciously pleased to open it The following representatives of the Central and Provincial Governments and of the Indian States attended

LIST OF MEMBERS

The Hon ble Kunwar Sir Jagdish Prasad K C S I C I E O B E
Member in Charge of Education Health and Lands Department and Chairman Imperial Council of Agricultural Research
Chairman

Ministers and Members from Provinces and Indian States

The Hon'ble Mr A K Fazlul Huq
Chief Minister, Bengal

The Hon'ble Mr. V. I. Muniswami Pillai,
Minister for Development, Madras.

The Hon'ble Mr. Morarji Desai,
Revenue Minister, Bombay.

The Hon'ble Mr. Anna Babaji Latthe,
Finance Minister, Bombay.

The Hon'ble Mr. Nalini Ranjan Sarkar,
Finance Minister, Bengal.

The Hon'ble Mr. Shamsuddin Ahmed,
Agriculture Minister, Bengal.

The Hon'ble Dr. K. N. Katju,
Minister in charge of Agriculture, United Provinces.

The Hon'ble Rao Bahadur Chaudhri Sir Chhotu Ram,
Minister of Development, Punjab.

The Hon'ble Sardar Bahadur Sardar Sir Sunder Singh Majithia,
Revenue Minister, Punjab.

The Hon'ble Dr. Syed Mahmud.
Minister for Development and Agriculture, Bihar.

The Hon'ble Mr. Anugrah Narayan Sinha,
Minister for Finance and Local Self-Government, Bihar.

The Hon'ble Khan Mohammad Abbas Khan,
Minister for Industries, North-West Frontier Province.

The Hon'ble Qazi Attaullah Khan,
Minister for Education, North-West Frontier Province.

The Hon'ble Pir Illahi Baksh Nawazali Shah,
Revenue Minister, Sind.

The Hon'ble Mr. N. Kanungo,
Minister for Agriculture, Orissa.

Mr. R. M. Crofton, I.C.S.,
Revenue, Police and Agriculture Member, H. E. H. the Nizam's Government, Hyderabad (Deccan).

Mr. K. V. Uplap,
Minister in charge of Agriculture, Baroda.

Ali Martabat Motamid-us-Sultan, Rai Bahadur Raja Oudh Narain Bisarya,
Revenue Member and President, State Council, Bhopal.

Ali Martabat, Amin-ul-Mulk, Wala Qadr Mr. Salamuddin Khan,
Member for Law and Justice and Commerce and Industry, Bhopal.

Khan Bahadur Nawab Choudhri Mohammad Din,
Revenue Minister, Jodhpur

Raja Harikishan Kaul, C S I, C I E
Revenue Minister, Patiala

Kumar Shri Sursinghji,
Minister of Education, Nawanagar

Representatives of the Government of India

Sir Bryce Burt, C I E, M B E I A S,
Vice Chairman, Imperial Council of Agricultural Research

Mr M W Yeatts, C I E, I C S,
Joint Secretary, Education, Health and Lands Department

Mr A M Livingstone, M A, B Sc,
Agricultural Marketing Adviser to the Government of India

Dr W Burns D Sc, I A S,
Agricultural Expert, Imperial Council of Agricultural Research

Mr P J Kerr, M R C V S, I V S,
Animal Husbandry Expert, Imperial Council of Agricultural Research

The Hon'ble Mr S N Roy, C S I, C I E, I C S, Secretary Communication Department

Mr F D Souza Member (Transportation), Railway Board

Dr T E Gregory, D Sc, Economic Adviser to the Government of India

} *Attended a part of the Conference.*

Substitute Delegates

Mr K B L Seth, I C S,
Revenue Secretary, Central Provinces and Berar

Dr S K Mitra
Director of Agriculture, Assam

Mr T G Rama Iyer,
Director of Agriculture, Mysore

Mr M R Fotedar,
Director of Agriculture, Kashmir

Lt Sardar D K Jadhav,
Director, Agriculture Department Gwalior.

Mr K R Narayana Iyer,
Director of Agriculture and Fisheries, Travancore

Mr S Basu, I C S . (*Secretary*)

The Hon'ble Sir Jagdish Prasad in inviting His Excellency the Viceroy to open the Conference said:—

YOUR EXCELLENCY,

My Department has ventured to make frequent demands on Your Excellency's time because we are assured of Your Excellency's warm support and lively personal interest in all measures designed for the betterment of rural India. We are indeed fortunate that Your Excellency has been pleased to accept our request to open this most representative conference so soon after Your Excellency's return to the burden and cares of your exalted office, as on the subject of agricultural marketing Your Excellency can speak with unquestioned authority. It was very largely as a result of the Report of a Departmental Committee over which Your Excellency presided in 1923 that the Markets Branch of the British Ministry of Agriculture was formed in 1924. Your Excellency was Chairman of the Market Supply Committee in Great Britain from 1933 to 1936. Your Excellency's labours have left a permanent mark on the history of agricultural marketing in England, and it is to the Royal Commission on Indian Agriculture, over which Your Excellency presided, that we owe the first serious attempt on the part of the Government of India to study, with a view to improvement, the marketing of agricultural and animal products in this country. In 1934 the Government of India gave a grant of about Rs. 27 lakhs to provide the cost of a Central Marketing staff for a period of five years and to enable grants aggregating Rs. 10 lakhs to be given to the Provinces by the Imperial Council of Agricultural Research. It was only in January 1935 that the new organisation began to function.

The Central and Provincial marketing staffs have thus been in existence for less than 4 years. The problems which they have to face are more intricate and of wider range than those of Western Europe and America by reason of the numbers involved, the indebtedness and ignorance of the producers, their lack of organisation, the difficulties of rural finance, the comparatively primitive nature of rural communications and rural transport, the chaotic condition of the markets with a multiplicity of weights and measures and a varied host of middlemen, some necessary, others superfluous, that encumber the road from the producer to the consumer.

There is little doubt that enormous waste is going on between the price obtained by the producer and the price that the consumer has to pay. Our agricultural statistics are notoriously deficient. It is not possible for me to vouch for the absolute accuracy of some of the figures which I quote, but according to some recent estimates, for wheat the producer's share of the consumer's price is about 60 per cent., for rice 50 to 60 per cent., and for fruit considerably less. While making allowance for a wide margin of error in these figures, there can hardly be any doubt that with efficient organisation, not only should the producer get a better price but there should be a marked improvement in quality. It is indeed a painful commentary on the present state of affairs that even of an article of such great use in India as *ghi*, a pure urban supply is scarcely obtainable. Adulteration of milk in our towns is notorious.

Considering the short time during which the Central and Provincial staffs have been working we may claim to have made a good beginning. We have made surveys of the marketing conditions of a number

of commodities on the lines laid down by the Royal Commission on Agriculture We have passed a Central Act to enable certain agricultural products to be standardised, graded and marked We have established about 60 grading stations for the grading of fruit, *ghi*, hides and skins eggs and tobacco We have, in collaboration with the trade, arranged for standard contracts for certain heavy staple commodities like wheat and linseed which enter into the wholesale trade of the country and we have helped in the drafting of provincial legislation for the regulation of markets So far the value of the commodities we have graded is only about Rs 20 lakhs, a mere drop in the ocean, when the value of *ghi* alone is between 80 and 100 crores of rupees We have yet to do much to organise the producers, whose interests must remain paramount, so that they may be able to bargain on more equal terms with the better organised distributors and consumers of their produce and may be able to get the full premium for quality and purity of their produce The task before us is difficult and requires patient and persistent effort over a number of years before we can make our agricultural marketing organisation up to date and efficient The presence this morning of Hon'ble Ministers from autonomous Provinces and from Indian States to whom I wish to extend a warm welcome and the significant fact that a Viceroy with such expert knowledge of agricultural problems both in this country and in England is here to mark the importance of this occasion makes me hopeful that our deliberations will be fruitful and that we will be able to devise and what is much important, put into force as circumstances permit effective measures to secure for the producer a more adequate return for his produce to the distributor a reasonable remuneration and to the consumer a regular supply of commodities of assured quality at reasonable prices The objective I believe, is to improve the essential services and to eliminate the non essential without injustice to any interest or class

And now, it is my privilege to ask Your Excellency to be pleased to open this conference and to express to you our grateful thanks for the honour which Your Excellency has done us in coming here today to inaugurate these proceedings

His Excellency the Viceroy then addressed the Conference as follows —

HIS EXCELLENCY THE VICEROY'S SPEECH ON THE OCCASION OF OPENING THE CONFERENCE OF MINISTERS ON AGRICULTURAL MARKETING ON THE 29TH NOVEMBER 1938

GENTLEMEN,—

I am glad to welcome to the Capital this very representative gathering of Ministers from the Provinces of British India and from the Indian States Your attendance here today, and many of you have travelled far in order to be with us, is welcome proof of the importance you attach to the subject of Agricultural Marketing Let me say at once that your interest will be an immense encouragement to all in the Government of India who have been associated with this most important aspect of agricultural improvement

Sir Jagdish Prasad has referred to my past experience in the field of agricultural marketing In Great Britain my colleagues and I signed the last of our five reports on the Distribution and Prices of Agricultural Produce in November 1923 These reports led in 1924 to the setting up of the Marketing Branch of the Ministry of Agriculture and in 1928 Parliament passed the Agricultural Produce (Grading and Marking) Act I

mention this because it is of interest to notice that in Great Britain it took about 5 years to get under way from the moment of the initial impulse.

In India, as Sir Jagdish has reminded us, the Royal Commission on Agriculture, reporting in 1928, stressed the great importance of Agricultural Marketing and linked it with transportation. In 1934 the Provincial Economic Conference led to the initiation of the present marketing scheme under which the Government of India provide a central staff now consisting of 20 officers, while the Imperial Council of Agricultural Research has provided ten lakhs of rupees spread over a period of five years to meet part of the cost of Provincial Marketing Staffs. These grants were made in order that the all-India commodity surveys might be carried out on an uniform basis. But it is worthy of comment that, at each stage, there has been spontaneous co-operation from the autonomous Provinces and States. Each provincial Government has from the outset, at its own cost, provided a Provincial Marketing Officer to take charge of the Provincial section of the work; and several Governments have provided additional marketing staff and, more recently, have taken over some of the experimental developments such as grading stations. Many of the States, of whom no less than 220 have co-operated in this matter, have provided their own marketing staffs, and they have all readily collaborated with the Central Marketing Staff both in the commodity surveys and in such practical matters as marking and grading. In 1937 the Central Legislature passed the Agricultural Produce (Grading and Marking) Act, and it is significant to notice that in India this stage was reached about three years after Mr. Livingstone's arrival and rather less than two years from the completion of the Marketing Staff. In England, as I have told you, a period of five years elapsed between the setting up of the Marketing Branch and the passage into law of the first Marketing Act. It is, I think, encouraging to note that despite the formidable complications and diversities of the Indian marketing system, merchants and market men in this country have shown themselves just as ready as their brethren in the West to avail themselves of well thought out marketing improvements. The position today is that six marketing reports are now complete, and that a further four are well advanced. In congratulating all concerned upon the very promising beginning that has thus been achieved, I feel that I must affirm my conviction, born of my own considerable experience, that adequate preliminary surveys are essential to the construction of sound schemes of marketing. Careful economic reconnaissance is an essential preliminary of every sound scheme, and I would confidently recommend all who are responsible for the construction of such schemes to count neither time nor money wasted which are spent in prosecuting with zeal and efficiency these essential preliminary studies. In work of this nature, anxious as we all of us naturally are to improve producers' prices, it is seldom wise to attempt the short cuts. Rough and ready methods may seem at the outset to give quick results, but those are not the results that will stand the test of time. Organized marketing means the application of scientific methods to the problems of collection and distribution. That is why emphasis is laid on the importance of basing all future action on an adequate assembly of tested facts. Again, in using those facts and in drawing deductions from them, the scientific is the only safe method, which is to mistrust each conclusion until it has been subjected to every possible test.

In India an important stage has now been reached for many marketing surveys have been completed or are well advanced and broad conclusions have emerged which call for application on a wide scale It is satisfactory to note that Central and Provincial Staffs did not await the completion of the all India commodity reports before studying the possibilities of development At a comparatively early stage the necessity of certain lines of improvement became clear The standardisation of weights and measures a wider adoption of the system of regulated markets which had already proved its value in some parts of India a fact emphasised by the Royal Commission on Agriculture are recommendations common to all the reports It was also apparent from the outset that grading and standardisation would offer a fruitful field for development and in consequence on the recommendation of the Provincial Economic Conference of 1934 the preliminary studies on quality necessary for the consideration of grade standards were started simultaneously with the marketing surveys This stage was followed by the setting up of experimental grading stations for such commodities as fruit eggs and hides and skins which the surveys showed to be susceptible of such treatment It was speedily found that as in other countries legislative action was needed to protect the marks and as Sir Jagdish Prasad has said the Agricultural Produce (Grading and Marking) Act directed to that purpose was passed by the Central Legislature in February 1937

It is of interest to note that the total number of experimental grading stations now in operation is about 25

Standardisation the determination of grades is more than agreement on convenient categories of physical attributes—size colour purity water or fat content and the like Standards must be very definitely related to the requirements of the consumer that is to the saleability of the produce Standardisation is a prerequisite of effective advertisement Standardisation the determination and strict adherence to grades is a key to distant markets and—given improved world conditions—a sure road to expanding business But marketing organizations can do something beyond promoting the orderly and economic distribution and sale of primary produce An efficient marketing organization should be the grower's intelligence bureau Often you will find that the cultivator who cannot himself be in touch with distant and overseas markets will prefer a crop or a particular variety of some crop because of its agricultural advantage that is because it is easy to grow or because it matures at a convenient moment in the seasonal routine of the holding or appears to give a particularly heavy yield Sometimes indeed a variety will be sown in deference to mere local fashion and familiarity But the Marketing Officer who knows the requirements of the ultimate markets and the prices ruling in those markets is quite frequently in a position to advise the cultivator that he will increase his prospects of profit by growing some variety other than that one which seems to possess the highest agricultural advantage Evidently this function of a marketing service may be of great value in conditions in which world markets in terms of the relative demand for different kinds of primary produce is—for one reason or another—in a state of change and uncertainty Causes so different as the development of synthetic substitutes or the economic aftermath of a war may substantially promote the demand for one type of produce at the expense of some other Consider how much loss may be spared to the grower if his marketing organisation—

what I have called his intelligence bureau—is able to provide him with very early warning of such a change in demand.

The improvement of marketing offers a fruitful field for co-operation between the Central Government, Provinces and States. The development of marketing, in the main, falls within the provincial sphere, but the main problems are of a wider character. Though the production of many commodities is localised, (the areas of concentration being scattered throughout the country and not being confined to any particular Province or State), the consumption of a product is generally spread over the whole country and many are of all-India importance both as regards our internal and export trade. Wider issues relating to the finance of the primary producer are also involved, since marketing reforms are essential before the commercial banks can fully develop a system of short-term produce advances. In the report of the Agricultural Credit Department of the Reserve Bank of India for 1936 it is stated that short-term advances for marketing produce should be regarded as one of the most important parts of banking business, but that the commercial banks have hitherto been unable to develop produce advances to the extent of their capacity owing to the extraordinary diversification and vagueness of market conditions throughout India and the manner in which produce contracts are drawn. In this connection, the Report stresses the importance of the following improvements in marketing, machinery and practice: (*i*) a reasonable standardisation of the staples and of the contracts relating to them; (*ii*) the provision, in properly regulated markets and elsewhere, of suitable storage under conditions which would permit of proper insurance; and (*iii*) the establishment where possible and advisable of properly-regulated forward markets permitting of "hedging" and thus to the mitigation of violent market fluctuations. It is therefore satisfactory to note that an agreement has been reached with the principal trade associations for standard future contracts for wheat and linseed, and that discussions are well advanced in regard to standards for groundnuts and coffee. Equally to be welcomed is the progress now being made in several provinces with legislation for the setting up or improvement of regulated markets. As progress is made with these two items, the consideration of the establishment of more adequate terminal or future markets would be possible. To what extent provinces will, in future, require assistance from a central marketing staff in this and cognate matters is one of the matters which the Conference will consider.

In conclusion let me again say how great a pleasure it is to me to welcome you here today, and how entire is the confidence I feel that your labours in this Conference will contribute in substantial degree to the promotion in India of orderly and efficient marketing of agricultural produce, an object of the utmost importance both to the cultivator and to the people at large.

II.—RESUME OF PROCEEDINGS

The Agenda of the Conference included *inter alia* the following subjects

(i) Progress reports on—

(a) the work done and results obtained by the marketing staffs and

(b) the further work awaiting immediate attention for the development and improvement of marketing,

(ii) Agencies necessary (Central Provincial and State) for carrying on marketing work, and relation between the Central staff and the marketing staffs in Provinces and States, with special reference to the technical assistance required in future (after December 1939) from any Central Staff,

(iii) Steps taken (or to be taken) in various Provinces and States —

(a) with the object of establishing a closer relationship between the local marketing staffs and other departments concerned and with Ministers and

(b) for the correlation of agricultural production and marketing with a view to the production of the type quality and quantity required

The question of the competence and the functions of the Conference was raised and it was pointed out from the Chair that the Conference included representatives of non constituent as well as constituent States of the Imperial Council of Agricultural Research and other Ministers apart from Ministers of Agriculture who normally constituted the Governing Body of the Council The recommendations of the Conference would, however be submitted to the Governing Body of the Council as well as to the Central Government and Governments of Provinces and States

In the matter of procedure it was agreed that the business of the Conference should be conducted on the basis of draft resolutions which should cover the main points under consideration During the preliminary general discussion the Conference observed that draft resolutions should also be prepared dealing respectively with —

(a) continuance of the Central Marketing organisation

(b) the continuance of the system of grants to Provinces and

(c) the subject of railway freights

The following is a resume of the discussions —

Progress of marketing scheme—Continued co operation by Provinces and States

A preliminary discussion and review of the work took place on the basis of circulated papers (Appendix) dealing with items 1(a) and (b) of the agenda These indicated the progress of the work done and the results obtained by the marketing staffs so far and the further work awaiting immediate attention

Marketing surveys which formed the foundation for further work had been completed in respect of 13 commodities and 4 all India reports had been written Other 17 surveys were being carried on These surveys have brought out the various factors which prevent the producer from receiving a larger share of the price paid by the consumer Market

charges, for example, are in many cases high and numerous and there was therefore much need for their regulation and control by markets Acts in the Provinces and States.

The surveys indicated also the need for the standardisation and grading of agricultural produce in order to eliminate waste, reduce the number of malpractices such as adulteration, and provide a proper basis for trading in the interests of both producers and consumers. Rules had been made under the Agricultural Produce (Grading and Marking) Act prescribing standards for 9 commodities.

Experimental grading stations had been opened at about 60 centres and even allowing for certain failures these stations showed an average net increased return of 9 per cent in the case of graded fruit, 5 per cent on eggs and 12 per cent on graded ghee. Where the grading stations had been established by producers themselves all this profit went to them direct but even in cases where this work was done at other key points in the course of distribution the producers obtained a direct benefit.

The standardisation of contracts by agreement with the trade and the introduction of mutual instead of non-mutual terms in the case of staples such as wheat, linseed and groundnuts tended to reduce the amount of losses on account of dirt and other impurities put on the market and ensured the payment of an adequate premium to the producers of high quality produce.

The surveys indicated the need for an improved market news service for producers and for better arrangements designed to eliminate price risks through the proper operation of "future" markets. They also showed various directions in which the producer might secure a wider market for increased production but in this connection there was apparently a need for the closer co-ordination of production and marketing.

In the course of the discussion several members referred to the progress made in their respective Provinces and States in regard to the introduction of Markets Acts and for the standardisation of weights in regard to which assistance was required through central legislation. Attention was drawn to the need for surveys on other important crops, *e.g.*, jowar, bajra and castor seed.

In acknowledging the assistance from the Central Marketing Staff the inter-dependence of Provinces and States was emphasised and it was claimed that the Central Government should place its officers still more freely at the disposal of the Provinces.

The discussions in general showed that progress in regard to marketing was being made in one direction or another in all the Provinces and States represented at the conference and that there was a great need for further progress and the continuance of close co-operation between the Central and Provincial and State staffs. The conference thereupon adopted the following resolution :—

Resolution No. 1.

"That the marketing scheme has already shown evidence of being of value to producers and that all Provinces and States should continue to co-operate in the future so as to maintain steady progress throughout the whole of India in regard to the improved marketing of all commodities."

Marketing Surveys

It was claimed that the central and local marketing staffs should assist any Province or State to carry out special investigations in respect of any commodity regarded as of particular importance. The discussion in regard to the Indian language to be used in the publication of the abridged editions resulted in an agreement that Hindustani should be taken to include both the Hindi and Urdu scripts.

Emphasis was laid on the desirability of the results of the local marketing surveys being made immediately available to Hon'ble Ministers. At the same time it was recognised that these would require to be checked in the first instance by the Central Marketing Staff.

The deliberations of the conference in regard to these points were embodied in the following resolution:—

Resolution No. 2

"(a) That commodity marketing surveys should generally continue to be planned and compiled on an all India basis but any Provincial or State government desirous of carrying out a special investigation on any other commodity may call for assistance from the Central Marketing Staff and the staffs in other Provinces and States.

(b) That the Central Marketing Staff should be responsible for the preparation and publication of the abridged marketing reports in English and Hindustani and that Provincial and State Governments should if they so desire undertake the translation and publication of abridged editions in other languages, and

(c) That pending the publication of the completed all India commodity reports which must necessarily await the reconciliation of discrepancies between the various local reports, Provincial and State governments should consider the publication of summaries embodying the main facts relating to local marketing conditions as soon as the material can be adequately checked by the Central Marketing Staff."

Grading Stations

The desirability of rapidly increasing the number of grading stations was brought to the attention of the Conference and it was suggested that in the case of experimental stations started by the Central Government the Provinces should not be expected to take these over until they had been running for a period up to five years and that central contributions should progressively decrease until the final year when the total cost would devolve on the local government.

This proposal was not generally accepted on account of the fact that if the Central Government had to maintain stations which had already proved their value, progress would be retarded in opening other stations for new commodities.

The need for strict examination and control of the quality of produce packed at the grading stations was felt and the Conference embodied its recommendations in the following resolution:—

Resolution No. 3.

"(*a*) That when the experimental grading and marking of any particular commodity has proved beneficial, the original stations may be taken over by Provincial and State governments and more grading and packing stations should be established by them as soon as possible;

(*b*) That in order to ensure adequate control of quality early steps should be taken in Provinces and States for the authorisation of a sufficient number of suitable persons (*e.g.*, marketing, agricultural and veterinary officers and market superintendents) in the course of their other duties to inspect graded produce."

Standard Contracts.

There was a general feeling that statutory backing should be given to the standard contracts in the event of trade and manufacturing interests failing to agree or to put them into general use. The Conference felt that action on the part of Provincial or State governments might in some cases be necessary and a resolution in the following terms was passed:—

Resolution No. 4.

"That the Central Marketing Staff should continue to negotiate with trade and manufacturing interests in India and abroad regarding the adoption of standard contract term for cereals, oilseeds and other products. The co-operation of the marketing staffs in Provinces and States would be essential particularly in securing the adoption of the standard contract terms by local associations for buying and selling in the *mundi*. Provincial and States governments might consider how far it would be necessary to give statutory authority to such contract terms."

Regulation of Markets.

The incidence of market charges were in many cases oppressive and their variability in many cases discouraged producers personally from making use of the market. It would be desirable that the nature and amount of the recognised charges in each market should be specified.

Legislation for the regulation of markets already existed in several Provinces and States but there was need for more rapid expansion and for the extension of the markets to cover all agricultural commodities. At the same time it would be desirable that the local governments themselves should take the initiative in establishing regulated markets not only in producing but also in consuming centres.

Attention was drawn to the difficulties of applying markets legislation to zemindari markets and to markets under the control of municipalities.

It was pointed out, however, that the essential question was the regulation of the conditions of trading in the market and of the market charges, and this need not interfere with *zemindari* rights

Some discussion ensued as to the items included under the term 'market charges' These relate to deductions for weighment and to allowances of all kinds but the general view of the Conference was that there was no need to specify all the various items included under the head 'market charges' since these were a matter of custom and generally quite well understood locally After further discussion the Conference adopted the following resolution —

Resolution No 5

(a) That Provincial and State governments should take steps to increase as far as possible the number of regulated markets and that existing Markets Acts should be extended to cover all agricultural and animal husbandry produce and to include markets in consuming centres as well as in producing areas,

(b) That Markets Acts be introduced in Provinces and States where no regulated markets exist with a view to

(I) the registration of markets and market charges,

(II) the establishment of regulated markets and

(III) the regulation of markets in regard to —

(i) fixing the number and amount of market charges and reducing the number of payments in kind

(ii) licensing of persons entitled to levy charges and market operators, *e g* , *dalals*, and

(iii) standardising practices in regard to weighment, sampling, grading and sale of produce

Standards of Weight

The importance of standard weights in improving marketing conditions and rendering market prices intelligible and comparable was emphasised In view of the fact that several Provincial Governments were prepared to proceed immediately with legislation on the subject it was considered desirable that central legislation should be passed at an early date prescribing standards of weight It was pointed out that a Bill would be introduced in the Central Legislative Assembly in January 1939 The following resolution* was then adopted —

Resolution No 6

"(a) That the necessary Central Legislation should be passed forthwith Provinces and States should then undertake corresponding legislation adopting the all India standards of weight (with suitable local multiples and sub multiples) and direct administrative action to bring the standard weights into operation at an early date, particularly in the more important markets (regulated or unregulated),

(b) That local Measures be examined by Provinces and States with a view to their standardisation "

*Since passed

Market News Service.

Several Provincial representatives emphasised the importance of agricultural news service and urged that there should be a broadcasting station in the Capital of each Province. A suggestion was also made that the Central Government should arrange for the installation of receiving sets and loud speakers at different market centres, due regard being paid to languages used in the different parts of the country. Further, a protest was raised against the broadcasting station at Peshawar being reduced to the status of a relaying station in spite of representations that a higher powered station be installed there.

It was then explained to the Conference on behalf of the Central Government how the scheme of broadcasting had been worked out and how it had developed. About 3 years ago a capital fund of Rs. 40 lakhs had been created out of revenue surplus for the development of broadcasting. The services of an expert—a research engineer—from the British Broadcasting Corporation had been obtained for the purpose of advising on the best method of installing broadcasting stations within the limits of that sum. Recommendations were duly made but it was found that the funds available were not sufficient to provide all the broadcasting stations proposed to be installed. In order to give the widest possible service it was decided to substitute a certain number of short wave stations for the medium wave stations originally recommended. The programme of development had also to take account of language difficulties—a most difficult problem in Indian broadcasting. Accordingly, medium wave stations were to be set up at Lahore, Lucknow, Rajahmundry, Trichinopoly and Dacca and short wave stations at Delhi, Bombay, Madras and Calcutta. All the short wave stations were now functioning, the Lahore and Lucknow medium-wave stations were in full operation, while the stations at Trichinopoly and Dacca were nearing completion. The response in the shape of increased receipts from licence fees had, however, been disappointing. There were at present only about 60 or 70 thousand licences yielding a mere Rs. 7 lakhs annually. Expenditure was in the neighbourhood of Rs. 23 lakhs and was progressively expanding. It was, for example, intended to introduce educational broadcasts in 1939 but all this cost money. Then again, there was a demand for a broadcasting station at Patna. The reason why Patna was not originally included was that it had been hoped to serve that area by the short wave station at Calcutta and the medium-wave station at Lucknow. Another demand for a broadcasting station came from Sind, but the difficulty was to find funds. The cost of running a 5 kilowatt station was roughly Rs. 1½ lakhs per annum.

With reference to the complaint that the Peshawar station was to be reduced to a relaying station, it was observed that it was indeed difficult to run a station unless there was an adequate response from the public. So far as could be foreseen, there was no hope of licence revenue increasing in the North West Frontier Province. It was proposed however to maintain the present staff in order to broadcast Pushtu programmes.

It was hoped that the Provinces would assist as much as possible in stimulating interest in broadcasting, thus bringing about an expansion in licence revenue. The Provincial representatives were assured that the Communication Department was not unmindful of their requirements and that as far as possible their wishes would be met.

The Conference was also apprised of the present position in regard to the dissemination of market news. There were two broadcasts from Calcutta, one in Bengali and the other in English, given both in the afternoon and evenings. These dealt with stock exchange prices, jute, cotton from Bombay and shellac. At Bombay, daily broadcasts were made giving the Liverpool and Bombay cotton rates as well as Bombay prices relating to bullion, wheat, linseed, castorseed, groundnuts and the closing stock exchange quotations. From Delhi, the rural programme in the evenings included prices of cereals, the ready and futures prices of wheat, gram and barley at Hapur as supplied by the Office of the Agricultural Marketing Adviser, livestock prices derived from the same source, quotations for gold, silver and vegetables. The rural programmes were timed for the early evening and the market news was broadcast about 7-15 P.M.

With reference to the feeling expressed by some Provincial representatives that 7-30 P.M. was too late, as the villagers would be in bed by that time and that the best time would be in the early afternoon, it was made clear to the Conference that the Central Government were taking steps to assess the benefits of the present system. If these broadcasts proved to be useful they would be developed and improved. As far as broadcasting in the urban areas was concerned, apprehensions were felt in regard to the broadcasting of market news for commodities such as cotton, as it affected telegraph revenues. Nor, was there any reason why speculators should be helped. Mention was made of the arrangements—shortly to be put into force—that had been made with the Indian Central Cotton Committee to broadcast cotton prices for selected markets in the Central Provinces. The experiment would be closely watched and if it gave indications of being useful to agriculturists, the number of such broadcasts would be increased.

It was added that various experiments had been tried to fix the most suitable times for village programmes. These were to some extent flexible, being earlier in the winter and later in the summer. Mid-day had been found to be inconvenient as the villagers were in the fields at that time. On behalf of the Communications Department a promise was held out that the question of time would be further examined and that every endeavour would be made to arrange such broadcasts to suit the convenience of those for whom they were intended. In this connection it was mentioned that a special scheme for rural broadcasting in Delhi province had been sanctioned for Rs. 1 lakh in order to give the Department sufficient data to enable it to decide to what extent rural broadcasting could be developed. The improvement which could be brought about in the lives of the villagers and the extent to which their interest could be aroused would be carefully watched and the results eventually placed at the disposal of the Provincial Ministers so that the best policy could be adopted.

A feeling was expressed in the Conference that the cost of receiving sets was high on account of the heavy import duty and that it was therefore highly desirable that the Government of India should afford facilities for the manufacture in India of cheap radio sets.

It was stated to the Conference that the problem of manufacture of cheap radio sets bristled with difficulties. Cheap sets could only pick up stations within a radius of 25 miles or so. A set for short wave reception could not be cheap. Two or three manufacturers of radio sets had

the whole question under consideration and it was hoped that some definite proposals from them would be received shortly. The fact that no industrialist had so far taken up the manufacture of radio sets in India in spite of a 50 per cent protective duty did not disclose a lack of enterprise but showed clearly that conditions for marketing cheap receiving sets were unfavourable.

The deliberations of the Conference were embodied in the following resolution:—

Resolution No. 7.

"(a) That the Central Marketing Staff should continue to collect and disseminate information regarding prices, supplies and stocks in important markets of those commodities which figure prominently in the export and import trade of India as a whole or of a number of Provinces and States, and

(b) That the Provincial and State marketing staffs should make arrangements for collecting and recording commercial prices for commodities of local importance—particularly in 'key' markets—and for disseminating news regarding prices, supplies and stocks to smaller country markets and to producers in rural areas."

Elimination of Waste.

The attention of the Conference was drawn to the large amount of waste which takes place particularly in the case of perishables through delay which occurs in the course of collecting the produce in areas of production for despatch to the main consuming centres. Any steps which can be taken to speed up the process would, therefore, be of distinct practical value. The Conference passed the following resolution:—

Resolution No. 8.

"That Provinces and States should examine the possibility of the more rapid assembling of perishable produce from villagers by the organisation of collecting agencies which should operate on the basis of the standard methods of grading and marking."

Reduction of price risks.

The existing provision in regard to the functioning of 'futures' trading associations was considered and it was recognised that while large well run financially sound institutions of this kind had a stabilising effect on prices, this was not so in the case of the smaller and more speculative bodies which existed in large numbers.

It was agreed that it would be desirable to bring this form of trading under some measure of control. In this connection, it was pointed out that "futures" markets legislation was a federal subject in the United States of America and that there were difficulties in the way of dealing with the problem by means of local legislation since the business might

merely move from one Province or State to another The indications were that central legislative control was essential and that the position needed examination The views of the Conference were embodied in the following resolution —

Resolution No 9

That with a view to the elimination of *fatka* (satta) markets of the gambling type and the establishment of proper futures' markets controlled by large financially sound and stable associations operating on a non profit sharing basis the Central Government should examine at an early date the possibility of central legislation controlling the conditions of futures" trading in agricultural produce

Adulteration

The marketing surveys have shown that the practice of adulteration was very widespread and that special products were freely marketed for no other purpose For example a synthetic essence of mustard was sold with a view to converting low grade linseed or groundnut oil into a form of mustard oil and a ground mineral product was offered as an imitation white flour for mixing with wheat flour This kind of business seemed reprehensible

A certain amount of administrative control in regard to adulteration was undertaken by some of the large municipalities but the practice of adulteration had spread to the villages where it had become difficult even to get pure ghee

Some discussion ensued as to the proposal put forward for colouring hydrogenated products so as to prevent their admixture with ghee and it was suggested that this aspect of the question might be examined The Conference was impressed with the need for more drastic steps being taken and after some discussion resolved —

Resolution No 10

That a special examination be made in Provinces and States of their existing Pure Food Laws and of their system of administration with a view to remedying the evils of adulteration "

Marketing Staff

The question of the continuance of the Central Marketing Staff was considered The Provincial and other representatives expressed their appreciation of the all India marketing survey reports and hoped that the output of these reports would be speeded up With a view to economy it was suggested that it might be possible to eliminate a certain amount of apparent duplication in checking the facts and figures by leaving this work to be done entirely by the Central Marketing Staff It was pointed out however that this was not possible particularly in regard to livestock and other products for which no statistics were available, and the material had to be collected locally

So far as the question of economy at the centre was concerned a good deal depended on the amount of help and assistance which the Provinces and States required from the Central Marketing Staff. From an impartial point of view it was claimed that the reports published by the Central Marketing Staff had been of the greatest possible utility as they gave a cross sectional view of the whole problem of Indian economics, and related the problems of agriculture as regards production, distribution etc., to those of industry. The existence of the marketing staff was absolutely indispensable for this work.

The quantity of agricultural produce coming on the markets was so large that even a very small saving per maund came to a very large sum of money, and the marketing organisation was showing in a practical way how it was possible to achieve very considerable aggregate results by unspectacular methods.

A reference was also made to the increased returns obtained as a result of the grading work which had so far been carried out.

Complaints had been made that the all-India reports were reaching Hon'ble Ministers too late to enable them to introduce the necessary legislation. It was felt, therefore, that a reduction in the Central Marketing Staff would be a false economy particularly as the expenditure on marketing represented a very small fraction of the total sums expended on agriculture as a whole in the various Provinces.

The Conference as a whole came to the conclusion that the work on the present lines should continue and that an effort should be made to speed up the survey and development work while every possible regard should be paid to question of economy and to the needs of the Provinces for financial assistance.

Accordingly, the following resolution was adopted:—

Resolution No. 11.

"(*a*) That the Government of India should maintain an adequate Central Marketing Staff, and that existing Provincial and State marketing staffs suitably augmented as required to carry on development work be continued;

(*b*) That the present system of grants to all Provinces should be continued and the amount increased; and

(*c*) That adequate grants should be made to the Imperial Council of Agricultural Research for *ad hoc* work on experimental marketing projects."

Closer relationship between departments concerned with marketing.

At the last Co-operative Conference a resolution had been passed recommending a closer contact between co-operative departments and the marketing departments of the various Provinces. Instructions were therefore issued to the provincial marketing staffs to get into touch with the co-operative departments to see how far they could work together.

Little response was forthcoming except in two provinces, namely, Madras and the Punjab, in which there happens to be a standing joint board consisting of the various departments concerned with agriculture, for example, co-operative, industries, agriculture and veterinary.

Further, the function of the marketing staff was to act as an intelligence bureau and their recommendations could in many cases only be put into effect by other departments It was, therefore, felt that there should be some machinery for co ordinating the work to avoid overlapping For this purpose it was suggested that there should be some kind of Standing Marketing Committee, the duties of which would be to examine all problems relating to the improvement of marketing and to make the necessary recommendations to the Hon'ble Ministers concerned

It was stated that in some Provinces all the beneficient departments connected with agriculture and industry were included in one portfolio under one Minister and in such cases co ordination was possible However, the general principle of having some machinery available to assist the Hon ble Ministers was accepted This led to the adoption of the following resolution —

Resolution No 12

That there should be in each Province and State a Joint Board of Standing Agricultural Marketing Committee which in addition to non officials would include the Directors of Agriculture, Veterinary Services and Industries, the Registrar of Co operative Societies and the Senior Marketing Officer and such other railway or departmental representatives as may be found desirable The duties of this Joint Board *inter alia* would be to establish and maintain closer relationships between the various departments concerned with marketing work and to examine and submit proposals to government in regard to improved marketing The Joint Board would also take into consideration the correlation of marketing with Agricultural production on the one hand and with industries allied to agriculture on the other '

Correlation of agricultural production and marketing

It was felt that there was need for supplying the market with the right kind of material which the consumers require and that to secure an adequate supply of the particular quality required some measure of control of production was essential particularly in regard to the variety, seed supply, cultivation methods etc Many local handicaps had to be overcome before producers could be induced to undertake the right type of production and secure the corresponding benefit There was general agreement on the principle but some conflict of opinions in regard to the methods to be adopted

It was suggested that special wholetime officers should be appointed in each Province or State one for Crops and the other on the Animal Husbandry side Some Provincial representatives however doubted the necessity for such appointments and suggested that the Imperial Council of Agricultural Research should set up a Standing Committee on crop

planning. After a somewhat exhaustive discussion the deliberations of the Conference were embodied in the following resolution:—

Resolution No. 13.

"That in each Province and State particular attention be given to crop and livestock development and to the initiation of scheme for:—

(a) encouraging the production of those types of produce which are mainly in demand and which are suited for commercial development,

(b) encouraging increased production of those commodities for which the marketing surveys have shown openings to exist,

(c) following up from the production aspect the other results obtained from the marketing surveys from time to time.

Provinces and States might care to consider for this purpose the appointment of a Crop Development Officer and a Livestock Development Officer who would work directly under the Director concerned and whose duties would be to initiate and supervise these schemes. These officers should be members of the Standing Agricultural Marketing Committee. The Imperial Council of Agricultural Research should constitute a Standing Committee for Crop Planning".

Transport.

It was stated to the Conference that the marketing surveys revealed that freight represented a relatively large part of the total cost of distribution and that the introduction of special station to station rates could effect a direct reduction in transport charges and provide producers with a wider market. The provision of improved transport facilities in detail would also tend to reduce costs and save damage and waste.

Various speakers in the course of the discussion alleged that not only were freights disproportionately high for short as compared with long hauls but that the rates also tended to favour imports to the detriment of the indigenous trade.

It was explained on behalf of the Railway Administrations that according to the railway freight structure—which may appear to the layman as somewhat complicated—commodities were grouped into 16 classes, the lowest class being the first category with a charge of ·38 pie per maund per mile. Within this class were grouped most of the principal agricultural staples. The highest class was rated at 1·87 pies per maund per mile and embraced explosives and similar other dangerous articles. There were three divisions into which railway freight rates could be grouped, *viz.*, (a) class rates, (b) schedule rates and (c) station-to-station rates, There was a very large number of station-to-station rates, most of which were on a considerably lower basis than the class or schedule rates that would otherwise be applicable. These were given for the special purpose of facilitating the movement of produce between large growing and consuming centres. If some of these rates formed a large proportion of the prime cost of the produce this was due to the distance factor. For instance, wheat, the price of which was, say, about Rs. 2 per maund at

Lyallpur, was being sold at over Rs 3 at Calcutta largely because the freight was a little more than Re 1 per maund, but it was apt to be overlooked that the distance from Lyallpur to Calcutta was about 1,250 miles. There were, however, cases in which short distance freights were relatively higher than long distance ones, but there were special reasons for such discrimination For example, it costs about Rs 1/12 per maund to rail cotton from Nagpur to Bombay, whereas the freight from Calcutta to Bombay more than double the distance—was only Rs 1 8 0 per maund This was because of competition from steamer companies trading between Calcutta and Bombay whose charge was also about Re 1 per maund It was pointed out that if there was to be a general reduction in the freight rates for agricultural commodities, other traffic would have to pay higher rates in order that the railways might pay their way Otherwise the burden would have to be borne by the general tax payer and indirectly by the agriculturist in the long run The railways had, however, already introduced certain station to station rates for agricultural commodities and were willing to consider proposals for extending such rates if they are calculated to bring increased traffic

The Government could not accept the view that the railways discriminated in their rates by favouring export and import commodities to the detriment of the internal trade The Acworth Committee in 1921 had effectively disposed of any ground for criticism of this nature and the Public Accounts Committee of the Central Legislature, who had taken up the matter about three years ago had been given a full explanation of the position at their meeting in July, 1936

Various instances were quoted of cases where concessional rates would be desirable and it was claimed also that there was a need for reconsideration of the freight rates by river steamship companies as well as railways

The Conference eventually adopted the following resolution on the subject —

Resolution No 14

"(a) That railway administrations and other transport agencies should be asked to take all possible steps to reduce the incidence of freight charges and to provide better facilities for the movement of Agricultural produce,

(b) That this Conference deprecates differential railway freight rates calculated to favour imported as against indigenous agricultural produce"

Final Resolution

Finally, in order that the deliberations of the Conference should bear fruit, the Conference resolved —

Resolution No 15

"That copies of these foregoing resolutions be forwarded to the Central Government and to all Provincial and State Governments and to the Governing Body of the Imperial Council of Agricultural Research with a recommendation from the Conference that they may be implemented"

III. CONCLUSIONS OF PROCEEDINGS.

At the end the Hon'ble Chairman thanked the members of the Conference for their co-operation in discussing the various problems which had been before them and in making the Conference a success.

The Provincial representatives reiterated their request for financial assistance from the centre for the continuance of marketing work and the Hon'ble Chairman undertook to forward their requests to the appropriate department of the Government of India. He also expressed the conviction that the personal contacts which had been made between the Hon'ble Ministers and the officers of the Central Government, were of great advantage and of the utmost importance.

APPENDIX

CIRCULATED PAPERS ON CERTAIN SUBJECTS DISCUSSED AT THE CONFERENCE OF MINISTERS ON AGRICULTURAL MARKETING HELD AT NEW DELHI ON THE 29TH AND 30TH NOVEMBER 1938

SUBJECT No 1

Report on —

(a) work done and results obtained by the Marketing Staffs,

(b) further work awaiting immediate attention for the development and improvement of marketing

(Note by the Agricultural Marketing Adviser)

The Central Marketing Staff works in close conjunction with the local staffs in Provinces and States and also with the staffs appointed by special Cess Committees *e g* , for jute, lac and coffee

A *Marketing Surveys*

It is essential in the first instance to get together all the facts relating to supply demand, prices, methods of costs and distribution of each commodity The surveys are planned by the Central Staff and local reports are submitted by the various marketing staffs to be compiled into one all India report This forms the foundation for all future work

The position in regard to these surveys is shown on the next page

B *Standardisation and Grading*

Quite early in the course of the preliminary survey work certain defects became obvious and it was not necessary always to await the final publication of an all India report before commencing to take action This applies particularly to the question of quality Much of our Indian produce put on the market is dirty, defective and adulterated Steps were therefore taken in 1937 to pass the Agricultural Produce (Grading and Marking) Act, 1937, for prescribing standard methods of grading and marking and for establishing experimental grading stations to see to what extent producers could benefit by putting high grade produce on the markets The results of these efforts are indicated on pages 25 and 26 *infra*

As a further means of reducing the amount of dirt and adulteration the attention of associations of manufacturers and traders was directed to the need for uniform standard contract terms throughout India for the purchase and sale of the main staple commodities, such as cereals and oilseeds That these efforts have met with a considerable amount of success will be apparent from page 27 *infra*

C *Development Work*

Various other practical lines of action have also become apparent in the course of the surveys Many recommendations are of a general character and relate to the regulation of markets and market charges, the better organisation and control of dealings in "futures", improved market news service, establishment of standards of weight, etc , as indicated on pages 27 to 31 *infra* Other special recommendations regarding particular products will be found on pages 31 to 37 *infra*

So far as development work is concerned it will be appreciated that the main function of the Central Staff is to advise and give the initial

lead. Local conditions vary enormously and suitable adaptations of practical nature must be made locally to meet such conditions. Province or State, however, has a complete monopoly of the productio and trade of any single agricultural commodity. External markets eithe in India or abroad are therefore essential and matters affecting the inter provincial and export trade are important considerations.

No Province or State would wish to lag behind others in improving the conditions of their agriculturists, but naturally the legislative pro- grammes, political exigencies and finances of the various Provinces and States will largely determine the pace and direction of this work. The cardinal point at issue is to see how far it may be possible to maintain in future steady progress throughout the whole of India in regard to the improved marketing of all commodities.

A. Marketing Surveys.

The programme of surveys originally planned and subsequently adopt- ed at Marketing Officers' Conferences or commenced by special Cess Committees included the following commodities:—

Cereals and Oilseeds . . .	Wheat, Rice, Lin eed, Groundnuts, Barley, Gram, Mustard, Rapeseed and Toria and Maize.
Animal Husbandry Products . .	Cattle, Eggs, Milk, Hides and Skins, Ghee and Butter, Wool and Hair, Sheep and Goats and Fish.
Fruits and Special Crops . . .	Tobacco, Mangoes, Potatoes, Grapes, Bana- nas, Apples, Oranges, Pineapples, Coffee, Coconuts, Sugar, Lac and Cashewnuts.
Miscellaneous	Co-operative Marketing, Markets and Fairs, Cold Storage and Transport.

Work done.

Reports completed and published:

Wheat (including Hindi and Urdu editions).
Linseed.
Eggs.
Tobacco.
Grapes.
Cold Storage and Transport in Delhi.

urveys completed by Provincial and State Staffs (with certain minor excep- tions) and reports being compiled by Central Marketing Staff:

Milk.
Cattle.
Coffee.
Rice.
Groundnuts.
Bananas.
Hides and Skins.
o-operative Marketing.
otatoes.

Work in progress.

Commodities still under survey by Market- ing Staffs of Provinces and States and of special Cess Committees:

Markets and Fairs.
Maize.
Barley.
Gram.
Mustard, Rapeseed and Toria.
Coconuts.
Ghee and Butter.
Sugar.
Cashewnuts.

Wool and Hair.
Sheep and Goats.
Fish.
Lac.
Mangoes.
Apples and other pome fruits.
Oranges and other citrus fruits.
Pineapples.

e.—Survey work has not yet been started in respect of important commodities esamum, Castor-seed, Millets, Chillies, Vegetables, Dried fruits, Poultry, Animal y, etc.

B Standardisation and Grading.

Recommendations arising out of various preliminary surveys indicated the need for the standardisation and grading of agricultural produce in order to eliminate waste, reduce the number of malpractices such as adulteration, etc , and provide a proper basis for trading in the interests of both producers and consumers •

The Advisory Board of the Imperial Council of Agricultural Research recommended that this work should be divided into two sections·

(1) Marketing Legislation for prescribing standard grades and methods of marking for certain commodities such as fruits, eggs, ghee, tobacco, hides etc , and the establishment of experimental grading stations, and

(2) Standardisation of contract terms for heavy staple commodities such as cereals and oilseeds, to be arrived at in consultation with manufacturers and traders and to be controlled subsequently by trade associations, on the lines, say, of the East India Cotton Association

---

(1) *Marketing Legislation and Establishment of Grading Stations*

Marketing Legislation

Work done	*Awaiting attention*
Agricultural Produce (Grading and Marking) Act, 1937, passed by Central Government and Rules published for authorising persons to use the AGMARK in respect of the following commodities Eggs — Grapes Tobacco — Oranges Hides — Apples Skins — Mangoes Ghee — Plums	(I) Provincial Governments, Chambers of Commerce and trade interests have been consulted and a few replies are awaited regarding the addition of certain items to the Schedule attached to the Act, *e g*, Fruit products, Cotton of specified botanical varieties, Ata, Rice of specified varieties, Oilseeds and oilseed products, Wheat of specified varieties
Certificates of authorisation have been issued to 38 packers of AGMARK products	(II) The promulgation by Central Government of further Rules for the various commodities, and amendments of existing rules, some of which have already been notified
Letters have been issued to 34 persons authorising them to inspect produce graded and marked in accordance with the Act	(I[illegible] and [illegible] *and* [illegible] ugh-

Establishment of Grading Stations.

Work done.

The following grading and packing stations have been established some, *e.g.*, for fruits, were run only during the season:

Eggs (20). Pabbi, Peshawar, Kottarakara, Chongannur, Quilon, Delhi, New Delhi, Bombay (3), Calcutta, Etah, Mardan, Havelian, Lucknow, Bareilly, Rampur, Chinnaganjam (Madras Pres.), Serajganj, Daulatganj.

Hides (5). Agra, Delhi, Tangra, Garden Reach, Rampur.

Ata (2). Delhi, Lahore.

Tobacco (1). Guntur under the auspices of Indian Tobacco Association.

Fruits (13). Nagpur (oranges), Nasik (grapes), Tarnab (plums and peaches), Sheikh Mohammadi (grapes), Kashmir (apples), Assam (oranges), Sikkim (oranges), Rahuri (oranges), Bulsar (mangoes), Digha (mangoes), Malda (mangoes), Malihabad (mangoes), Baluchistan (peaches and grapes).

Ghee (18). Khurja (2). Aligarh, Hathras, Firozabad, Sirsaganj, Jaswantnagar, Shikohabad, Etawah, Cawnpore, Okara, Jaranwala, Phullerwan, Bombay, Calcutta, Delhi, Porbandar, Jamnagar.

Awaiting attention.

Establishment of many more grading stations in Provinces and States. This involves the provision of:

(*i*) certain funds in the initial stages to run the stations experimentally for demonstration purposes,

(*ii*) adequate staff to start and supervise the running of the stations,

(*iii*) authorisation of a sufficient number of suitable persons (*e.g.*, marketing and agricultural officers, market superintendents, etc.) in Provinces and States to inspect graded produce and ensure adequate control of quality particularly of food products such as ghee, eggs, etc.

(*iv*) steps to popularise and make known AGMARK products to consumers particularly in large consuming centres.

Results.

These grading stations have shown, particularly in the case of fruits and eggs, that producers can, in this way, secure enhanced prices for graded produce amounting in some cases to over 25 per cent. more than for the same products ungraded, even after allowing for discarding that part of the produce which is defective and not worth sending to distant markets. At 10 fruit grading stations for which complete records are available where over ½ lakh rupees worth of fruits were graded, the net increased cash return on the graded produce as compared with ungraded averaged over 9 per cent. *i.e.*, after allowing for the commercial cost of grading and for discarded produce. The average increased net return on the egg grading stations, even allowing for certain failures, amounts to 5 per cent. and on ghee 12 per cent. About 1 lakh rupees extra return has been obtained on these three commodities alone. So far twenty lakhs rupees worth of graded produce of all kinds have been put on the market.

(2) *Standardisation of Contract Terms*

Work done	*Awaiting attention.*
Trade Conferences—Ten trade conferences have been held and proceedings, including relevant papers, published	
Wheat—Standard contract terms drawn up for white wheat and adopted by the principal associations, millers and Karachi exporters as the basis of "futures" trading	... certain other ... "spot" trad- ... t for Durum
Linseed—Standard contract terms for "small" and "bold" linseed prepared and adopted by the leading associations at Bombay and Calcutta	Adoption of the standard terms for "spot" trading in the *mandis* Adoption of terms by exporters and millers in their upcountry buying contracts Recognition of terms by the Incorporated Oilseeds Association, London
Groundnuts—Basis of standard contract prepared and discussed with trade associations and manufacturers	Further conference to be held to settle final terms
Other products—Over 1,000 analyses carried out on Mustard, Rapeseed, Toria and their oils with a view to determining quality characteristics as a preliminary to defining standards Detailed examination and analyses of rice, gram, maize, barley, wool, butter and coffee have also been made	Discussions between the Central Marketing Staff, and trade and manufacturers' associations have been held in the case of coffee Others will be undertaken in due course

NOTE —In the course of the work on standardisation, the Marketing Staffs have collected 13,000 commercial samples of 24 commodities and arranged for their examination and analysis at 26 different institutions throughout the country

Results —Introduction of mutual instead of non-mutual terms in the standard contracts for cereals and oilseeds will reduce the amount of loss on account of dirt and other impurities put on the market For example, in the case of linseed sent to Calcutta alone the extra cost of freight on dirt and cleaning charges is estimated at Rs 3 lakhs per annum The cleaning charges at Karachi on wheat in the course of a year amount to somewhere about 4 or 5 lakhs rupees These expenses are largely unnecessary and to that extent could be saved by the general adoption of the new contract Further, the scale of allowances is so arranged that producers of high quality produce will in future get an adequate premium

The standardisation of contract terms in general promotes more rapid and efficient inter trading between different parts of the country and with buyers abroad

C *Development Work.*

The published reports and the preliminary surveys have given rise to a number of recommendations of a general character as well as special recommendations relating to particular commodities Development work for the improvement of marketing may therefore be divided into two categories, (1) General and (2) Special.

(1) *General.*

The general recommendations are designed to expand the market for Indian products and secure for the producers a larger share of the consumer's price by reducing the existing high costs of distribution. The following points particularly have been recommended as necessary:—

(*a*) Regulation of markets and reduction in the number and amount of market charges,

(*b*) Standardisation of weights and measures,

(*c*) Improved market news service,

(*d*) Elimination of waste and damage in the course of distribution,

(*e*) Measures calculated to reduce price risks and the seasonal depression at harvest time,

(*f*) More efficient distribution and expansion of the market.

(*a*) *Regulation of markets.*

The main recommendations under this head are:—

(I) that all existing markets and market charges should be registered,

(II) that regulated markets should be established in which—

(*i*) the number and amount of market charges should be fixed and the number of payments in kind reduced,

(*ii*) persons entitled to levy charges and market operators (*e.g.*, *dalals*) should be licensed,

(*iii*) practices in regard to weighment, sampling, auctioning, etc., should be standardised.

Work done.	*Awaiting attention.*
A model Bill has been prepared and circulated to all Provincial and State Marketing Staffs.	Introduction of a Markets Act in Provinces and States where no regulated markets exist.
Central Provinces and Berar, Bombay, Madras and Nizam's Dominions already have Market Acts and regulated markets.	Extension of Markets Acts in those Provinces and States where they exist so as to cover all agricultural commodities and include markets in large consuming centres as well as in producing areas.
A Markets Bill has been introduced into the Punjab Assembly. It is understood that the question of introducing corresponding Bills is under active consideration in the United Provinces, Bengal and Bihar.	There should be Provincial or State control over regulated markets.
	In order to multiply the number of regulated markets rapidly it is essential that the initiative should be taken by Governments and not left to producers or local authorities who are liable to be deterred by vested interests.

(*b*) *Standardisation of Weights and Measures.*

The multiplicity of local weights and measures leads to countless malpractices and makes comparison of prices impossible. Scales and weighing machines are generally defective. The absence of standard weights hampers trade in every direction and makes trade between one part of the country and another particularly difficult.

Certain States have prescribed standards of weight, *e.g.*, Mysore, where a maund = 24 lb. Prior to the Government of India, Act, 1935, the Bombay Government passed an Act standardising the Railway Maund (82-2/7 lb.) and for making standard weights compulsory by stages

throughout the Presidency With the passing of the Government of India Act, however, standards of weight became a central subject, but once the standards are prescribed the question of their introduction along with suitable multiples and sub multiples approximating the local weights in common use becomes a question for local governments It has been observed that when the introduction of standards of weight has been left to Municipalities and other local bodies the results have been negligible

Work done

The Central Government has decided to legislate and a Bill is now under preparation for introduction in the Legislative Assembly in the next ordinary session This will standardise the cardinal weights in the relation

180 grains	=	1 tola
80 tolas	=	1 seer
40 seers	=	1 maund (82 2/7 lb or 100 lb Troy)

Awaiting attention

When the necessary central legislation has been passed it will be for Provincial Governments to undertake further provincial legislation to introduce the standard weights in their areas along with suitable local multiples and sub multiples It is understood that the question is under active consideration in Madras, Bengal, United Provinces and Bihar

The creation of inspection staff and laboratories the elimination of defective scales, the introduction of standard measures, are matters falling entirely within the scope of provincial governments

It would be for Indian States to introduce corresponding legislation adopting the all India standards of weight and to take such action as may be necessary to bring them into operation

(c) *Improved Market News Service*

The surveys have shown that in respect of many commodities there is a lack of co ordination between markets For example, prices may be falling in one market and rising in one not far distant, one market may be glutted with supplies and in another produce may be scarce In order that the best possible price may be obtained, producers and the trade should be kept regularly informed of the position regarding supplies and prices There are two special kinds of news service, *viz* one for the markets and one for rural areas *i e*, for producers themselves

Work done

Weekly broadcast from Delhi by Central Marketing Staff in English and Hindustani

This bulletin is also issued to the press Similarly for the information of local producers daily prices at Hapur are broadcast every evening for wheat grain etc Daily prices and number of buffaloes arriving and sold in Bombay collected for distribution to producing and despatching centres

A broadcast service arranged from Lahore by the Punjab Marketing Staff in regard to local products Prices of fruits recorded at a series of markets and a bulletin issued by local marketing staff in United Provinces in conjunction with the Fruit Development Board In Madras weekly prices are collected and published in the gazette and the Indian Tobacco Association (Guntur) publishes a monthly bulletin regarding tobacco

Awaiting attention.

"Official" gazette prices are of little use from a marketing point of view A proper system of daily price recording in markets (particularly regulated markets) and from trade sources needs to be organised

Local Marketing Staffs might with advantage get in touch with local Station Directors of Broadcasting and devise schemes in consultation with them

Failing radio facilities the issue of bulletins direct or to the local press and the posting up of prices in markets should be tried particular attention being given to prices in ' key ' markets

(d) Elimination of waste and damage in the course of marketing.

The amount of waste in the case of perishables is enormous and even in non-perishables, such as wheat and linseed, the damage in the course of a year amounts to many lakhs of rupees. The transport of defective, adulterated, dirty and poor quality produce to market is a source of waste and loss but physical damage may be attributed generally to defective storage, transport and containers.

Work done.

Efforts are being made to have improved concrete storage (of Muzaffarnagar type) adopted at various centres in Punjab and United Provinces.

Experiments conducted on refrigerated transport showed a saving of loss and improved prices.

Experiments on improved containers for eggs indicate that losses in transit can be considerably reduced.

Awaiting attention.

More efforts to convince persons concerned that capital expenditure on improved storage pays through saving of waste and better prices owing to quality being maintained.

There is also room for development of cold stores, particularly in connection with fruits, vegetables, eggs and fish at the leading consuming markets.

Senders need education in use of refrigerated transport and storage.

More needs to be done to improve indigenous containers used in various Provinces and States and to introduce standard types.

Organised and more rapid collection of produce from village holdings in the case of eggs, ghee and other perishables.

(e) Reduction in price risks and in seasonal depression at harvest time.

Price risks in the case of perishables are very high owing to the irregularity of supplies and lack of suitable temporary storage. In the case of non-perishables apart from good long-period storage, it has been observed that sound properly-run "futures" markets have a stabilising effect on the seasonal price depression and that the existence of upcountry "futures" markets which are influenced by a large, relatively steady internal trade has a balancing effect on "futures" markets at the ports which may at times be unduly influenced by the fluctuating nature of the exports. "Fatka" or "Satta" associations of a gambling type (whether upcountry or at the ports) enhance the seasonal price depression to the detriment of producers.

Work done.

In regard to perishables, the I.C.A.R. fruit storage research scheme has defined the conditions of successful storage for mangoes, oranges and certain other fruits and vegetables and shown which of a number of varieties studied are commercially suitable for storage and transport.

For non-perishables, Punjab has appointed a committee to consider the question of the reduction of the number of "futures" (*fatka*) associations.

It is understood that the question of exercising control over such associations by registration and approval of their constitution and bye-laws, is also under consideration in Bihar.

Awaiting attention.

Better daily news service regarding supplies and prices of perishables and arrangements for temporary cold storage, particularly at large consuming centres.

Elimination of the numerous small fatka (*satta*) markets of the gambling type and creation (where none exist at present) of large, financially sound, stable "futures" associations operating on a non-profit sharing basis.

The finance of marketing and the seasonal depression in prices requires further local study, particularly as affected by the rates of interest of co-operative credit societies.

(f) *More efficient distribution and expansion of the market*

Apart from obvious reductions in the cost of distribution by way of a reduction in market charges and the elimination of price risks a larger income may be gained for producers as a whole by the more efficient dis tribution of their produce so as to provide them with better prices (particularly for high quality) and a wider market for increased production from their holdings

Work done	*Awaiting attention*
benefit to producers by giving better service than the individual middle men and being more efficient than the ordinary type of producers' co operative marketing society	The recommendation of the various survey reports so far published indicate that a good deal can be done to expand and stabilise the market for local producers by increasing the number and improving the technique of small industrialists depen dent on agriculture *e g* *Chakki* millers in the case of cereals and owners of *Ghanis* (Chekl us) used for crushing oil seeds
So far as the expansion of the market is concerned the Central Marketing Staff have had negotiations with interests concerned for the establishment of factories for the production of dried liquid or frozen eggs and for the manu facture of rice starch	Improvements in processing recommended in the reports would not only result in better prices for hides rice tobacco, etc, but extend the market, *e g* by preparing Indian tobacco (chewing and cigarette) of a quality which can replace imports
Discussions have also taken place with a view to having Indian wheat recognised as tenderable against the 'futures" contract of the Liverpool Corn Trade Association and in regard to the further expansion of the growing market for Indian tobacco in the United Kingdom In the Punjab consideration is being given to the production of fruit juices and canned products	Wider extension of co operative marketing activities to include the co operative orga nisation of primary village middlemen (*e g* there are at least 150 existing centres where village egg collectors might be organised with benefit to producers) and the further development of urban co ope ratives and the closer union of existing consumer s co operative associations with agricultural co operatives needs to be undertaken on a realistic basis
	The development of local industries allied to agriculture requires careful study with a view to their expansion It is essential in such cases however to ensure that the technical aspects of the question are under stood, that the business management will be sound and that a sufficiently wide market exists either in India or abroad for the particular product it is proposed to manufacture This involves a special and detailed survey in each case

(2) *Special*

As already stated no Province or State completely monopolises any one commodity, but the production in each case is to some extent loca lised so that certain Provinces and States are more vitally concerned than others The special problems of the various products are also to some extent local in character and can best be dealt with by local marketing staffs The general marketing improvements referred to above would bring about an improvement in each individual commodity It would not be possible to set out all the improvements specially required for each product and applicable in the different areas The following is however a summary of some of the main specific points calling for attention in the various Provinces and States

Fruits and Special Crops.

Fruits and Vegetables.—The value of Indian fruit production alone is estimated at somewhere between 100 and 200 crores rupees and yet information regarding the acreage and quantity produced in the different areas is almost entirely lacking. There is therefore an urgent need for accurate surveys of the production of fruit and vegetables as a preliminary to further development work, particularly in the way of the manufacture of fruit products.

The experimental grading stations have shown that on the average graded fruit has secured a net return of 9 per cent. more than ungraded and that fruit packed in improved containers commanded higher prices. This work therefore should be extended.

Partly owing to the absence of proper market information and also to the lack of adequate credit facilities at the time of harvest and marketing, growers as a rule sell their standing crop to contractors. The marketing surveys show that when growers sell direct in the consuming markets they secure Rs. 150 to Rs. 200 more per acre.

The organisation of cold storage accommodation at the principal distributing centres would reduce price risks and save a great deal of damage.

Growers lose heavily by planting varieties which are not of commercial value and by planting fruit trees which are not true to type or which have been grafted on inferior root stock. There is, therefore, need for the introduction of some system of registration of approved plant nurseries and also for ensuring that no departure is made by planting more new varieties with different characteristics in areas which already have a reputation for growing one particular type.

The utilisation of the crop for making fruit products requires local study and before attempting to develop the production of fruit juices and syrups or a canning or bottling industry a special local survey has to be made to ensure that a sufficient quantity of fruits (or vegetables) is available in the neighbourhood to keep a factory running on economic lines and also the types grown are suitable for the purpose. In addition it is necessary to ensure that an adequate market exists for the particular kind of product which it is proposed to manufacture.

Tobacco.—There are five main growing areas and in all of them with the possible exception of Nipani there is a striking absence of any established markets where growers can bring their produce for sale. It is therefore essential that regulated markets (with a system of open auctions) should be established at a few centres in the principal tobacco growing areas of Bengal, Bihar, Nipani (Bombay & Deccan States), Charotar (Bombay & Baroda) and Guntur (Madras). The Madras Government have notified their intention of applying the Commercial Crops Markets Act to the Guntur area. This example could be followed elsewhere.

High quality is important in tobacco, particularly since the general trend in the price of low quality is downwards while that of high quality continues to rise. The downward trend in tobacco prices in Bengal and Bihar particularly requires attention with a view to producing types which are more in demand.

Measures are needed to improve the production and distribution of pure seed and seedlings, to control the quality of tobacco grown and cured and

to introduce systematic grading from the grower onwards The licensing of fluecuring barns, re drying plants and of exporters and other buyers would appear to be a necessary preliminary to proper control

The production, marketing and export of cigarette tobacco on the basis of the standard grades already prescribed is indicated and in this the voluntary efforts of the Indian Tobacco Association should be used

The export trade, particularly in high grade Virginia cigarette leaf to the United Kingdom, is developing rapidly, but will continue to increase only so long as strict steps are taken to control quality on the basis of standard grades *Attention may also be directed to the fact that at* present India is dependent on the U S A for the regular supply of pure Virginia seed and for the expensive wooden hogs heads used for packing cigarette leaf

Animal Husbandry Products

Eggs —Nearly 75 lakhs of eggs have been graded and sold under the AGMARK The gain in price to producers has been as much as 15 per cent in certain districts and allowing for certain failures the average gain over all stations exceeds 5 per cent There are at least 150 important egg collecting centres (in some of which up to 50,000 eggs could be collected daily) already in existence where the co operative grading and marketing of eggs could be undertaken, the main object being to organise the village collectors

An association of AGMARK eggs packing stations should eventually be established, somewhat on the lines of the Egg Central Ltd in England

Improved containers have proved to be successful in effecting a considerable reduction in the loss due to breakages in transit which is estimated to be over Rs 15 lakhs per annum

Eggs worth a similar amount are lost annually owing to the absence of proper housing of poultry The loss of fowls themselves is extra Some attention might be paid to this, in connection with rural reconstruction work The improvement of *desi* fowls and ducks also needs attention

By not testing the quality of eggs in time and by allowing stale eggs to be transported and marketed at reduced prices, the trade suffers a further loss of nearly 30 lakhs of rupees annually A considerable part of this amount could be saved, if grading were introduced at the production end

The possibility of developing an export trade from Bengal, Travancore/Cochin and Madras Presidency calls for further investigation in those parts particularly with a view to establishing factories for the production of dried and frozen eggs The supply of eggs as ship s stores at the ports is also capable of expansion

Ghee —Enquiries show that it is difficult to obtain pure ghee not only in the cities but also in rural districts owing to the prevalence of adulteration Consumers are reluctant to pay higher prices even for the pure product owing to suspicion and fear of adulteration A number of grading stations have been established and already 3 25,000 tins of ghee of various sizes from 1 seer upwards weighing over 15,000 maunds and worth about 7½ lakhs rupees have been sold under the AGMARK The graded ghee has been selling at 2 or 3 annas a seer more than ungraded More grading stations are needed in almost all Provinces and States, but the tightening

up of the administration of the Food Adulteration Acts and Regulations is urgently called for in order that the graded ghee may become more rapidly established. The inspection and sampling of ghee under the Food Adulteration Act should be extended to small *mandis* also, as adulteration generally starts in the village.

An Association of AGMARK ghee producers should be formed to carry the costs of quality control; including the expenses of a central control laboratory.

Vegetable oils and oil products are used for adulteration of ghee mainly owing to their cheapness. It has been recommended that grading, packing and marking of such products should also be undertaken to ensure that they are free from animal fats and are manufactured up to the highest possible standard.

Milk.—The practice of producing milk in the urban areas is uneconomical and unhygienic. Rural producers should be organised preferably on a co-operative basis to collect and transport milk to the nearest consuming centres. Work in this direction has already been done with considerable success, for example near Calcutta, Madras, Allahabad and Nagpur, and should be extended to other areas.

For meeting the needs of large cities, pasteurised milk can be transported for long distances. Potential areas for developing this trade are to be found in North Bihar and Gujerat.

Adulteration of milk is apparently on the increase and in 1935, nearly 35 per cent. of the samples examined were found to be adulterated. Records of some leading municipalities show that less than one sample per shop per annum is being drawn. Proper enforcement of the Pure Food Laws is therefore urgently needed, and the fines imposed for adulteration should be exemplary.

The standards of purity also need revision. In this case technical difficulties arise owing to the fact that there are two types of milk, *viz.*, cow and buffalo, having different fat contents. The general tendency is to dilute buffalo milk which has higher fat content and to declare it as cow milk when an inspector draws samples. There should therefore be a regulation to the effect that all milk cans should be properly marked indicating whether their contents are cow or buffalo milk.

The standards should also cover cleanliness as well as the richness of milk. Dairies and cattle stables which conform to certain hygienic conditions should be encouraged to market their milk under a guarantee of purity, freshness and cleanliness.

Selling his produce in the form of fluid milk is most profitable for the producer. Propaganda and education to encourage milk consumption might be undertaken at suitable centres, particularly in schools.

Cattle.—Nearly 140 lakhs cattle annually assemble in the important markets and fairs and at least 12 lakhs of these are required to meet the demands for milk cattle in urban areas. The establishment of suitable terminal markets and stockyards at all large consuming centres are needed to facilitate efficient marketing. In those markets the market dues should be regulated and be reasonable. At present charges range from 1 anna to about Rs. 5 per head.

Market news with regard to milk prices, number of arrivals, number of expected arrivals and the range of price for cows and buffaloes at consuming centres should be made available in the producing areas in the same way as is already being done at Bombay

Milchstock should be registered in herd books and a certificate of registration along with particulars regarding performance, age, etc, should accompany each animal There are at least 500 or 600 *goshalas* and pinjrapoles throughout the country and the question of utilising these institutions for improving the quality needs special consideration in each province

In cattle markets and cattle fairs a system of licensing *dalals* is found to reduce malpractices and the system seems worthy of extension

Hides and Skins—Almost 2 lakhs of hides have been so far graded at the experimental grading stations This work has shown that about 40 per cent of the hides consist of C grade and rejections due to flayer's cuts, brand marks, gall and goad marks, warble holes, etc The practice of grading hides at municipal centres should be further extended and combined with demonstrations so as to train the flayers

The system of payment on grade basis will eventually help to check the practice of branding the animal on valuable parts of the hides, but further propaganda needs to be done in order that branding may be confined to the ears or cheeks

Nearly 6 million pieces of raw hides, 1 million pieces of half tanned hides, 21 million pieces of raw skins and 9 million pieces of half tanned skins are exported annually from India The Indian market for half tanned skins is controlled largely by the auctions held in the United Kingdom Systematic auctions would be desirable in this country and a 'futures' market for half tanned skins either in India (Madras) or in London

Cereals, Pulses and Oilseeds

Wheat—The standard contract terms apart from being used as the basis for 'futures' trading in the large centres should also be introduced for 'spot' trading in the small country markets This would assist in securing a premium to growers of better quality The practice of 'dara' sales at one price of various lots of different producers should be abolished particularly in regulated markets

Every effort should be made to eliminate dirt The carriage of extra dirt on wheat from the Punjab to Karachi for example is estimated at between 1 and $1\frac{1}{2}$ lakhs rupees per annum

Storage—The damage or loss on account of bad storage is estimated at over 2 crores every year Properly constructed [illegible] can eliminate much of this and can be run at a profit as for example at Muzaffarnagar Where trade associations are not prepared to [illegible] storage, something might be done to finance the [illegible] either through co operative organisation or some form of industrial finance corporation

Better storage accommodation suitably located [illegible] to a sound system of "futures" trading will help to [illegible] depression in prices

Associations trading in "futures" need to be controlled and brought within the scope of the Markets Acts in Provinces and States.

Improved hard types of wheat can secure a premium of about Re. 0-4-0 per maund above the average. Arrangements should therefore be made to market such wheats separately and to link up, with AGMARK *ata* turned out by *chakkis* and roller mills.

Distribution of seed wheat of improved varieties should be concentrated in specified localities and not spread indiscriminately so as to cause mixing of types.

Rice.—High premium can be obtained for certain qualities of fine rices. It is essential, however, to market them separately in pure form. Mixing with lower grade rices should be prevented, probably by the use of the AGMARK.

Storage, particularly of such high quality rices, is important and the premium on old rice is adequate to cover the cost of storage.

Parboiled rices have been found to be superior to raw rices in many respects in that they are more nutritive, cook better and give a high outturn of whole rice from paddy. The latest methods of parboiling need to be tried out and some propaganda to increase the consumption of parboiled rices would help the trade. Certain areas, *e.g.*, Patnai, Bijar, Sirimani, etc., might with advantage concentrate on the production of types suitable for export and avoid the mixing of types in their respective areas.

In deficiency Provinces, such as United Provinces, Assam, Madras, and Bombay, the introduction of a limited number of heavy yielding varieties would appear to be indicated.

Paddy and rice are commonly sold by measure and not by weight. The standardisation of measures is therefore important.

Linseed.—The standard contract terms should be more widely adopted and used for "spot" trading in upcountry markets.

The elimination of dirt is, in this case, even more important than in wheat. Bulk storage upcountry affords prospects of economy.

Where a large number of village *ghanis* exist in a producing area the market is steadier and the harvest time depression is less. Since the oil from such *ghanis* can be sold at a premium their extension should be encouraged.

The distribution of improved varieties and types of seed needs to be taken in hand. At present practically nothing is done for this crop.

Linseed oil is used in considerable quantities for adulterating mustard oil. The administration of the Food Adulteration Acts should be more stringent to ensure that no mixing of edible oils is permitted. Mixing may, however, be permitted in non-edible oils, but the nature and amount of admixture should be declared, particularly where mineral oils are mixed with vegetable oils (*e.g.*, with linseed).

Groundnuts.—So far as this crop is concerned, it seems desirable in general to concentrate on the export trade, since India has a very large export trade which absorbs about 25 per cent. of the production. Crushing in India is also steadily expanding and it may be noted that the quality requirements of Indian and foreign crushers are practically identical.

Standard contracts for buying and selling groundnuts for crushing should be introduced and a system of AGMARK grading and marking started for edible (handpicked) groundnuts

As the crop is at present almost entirely used for crushing into oil, the octroi charge in certain areas, which is based on the rate paid for dry fruits, is excessive and bears heavily on an industrial raw material

Licensing decorticating plants should be undertaken with a view to controlling the practice of wetting

NOTE ON POINTS IN REGARD TO TRANSPORT BROUGHT OUT BY THE MARKETING SURVEYS

(By the Agricultural Marketing Adviser)

There is considerable coastal traffic between the different ports in India and large quantities of agricultural produce are handled by river transport in certain areas Road transport is a large factor in short distance traffic The railways, however, play by far the most important part For example, over 2 million tons of wheat and linseed are put on rail in the course of the year, the average annual traffic in unmanufactured tobacco is more than 32 lakh maunds, and all the long distance transport of eggs is entirely done by rail

Rail Transport

The marketing surveys show that the cost of rail transport constitutes a big item in the total cost of distribution In the case of wheat, for example, the difference between the price of Punjab wheat at Lyallpur and of the same wheat at Calcutta is Rs 1-1 7 per maund of which Rs 1 0 4 is due to railway freight alone The average rail freight paid per dozen of eggs is Re 0 0 6 which represents about 15 to 17 per cent of the producers' price The question of railway freight charges, therefore, is one of importance

Any extension of the market for our produce would encourage further production and benefit railways in the long run Madras Presidency, for example, produces the earliest crop of mangoes amounting to about 4 lakhs maunds a year but only a negligible amount of this produce reaches northern markets In the same way Satgudi oranges of Cuddappa (Madras) do not reach northern India although they are available during the three months September November, when supplies of Nagpur oranges are small A trial experiment in the reduction of freight charges on plantains exported from Madras to north India during this year has resulted in a considerable increase in traffic

The reduction in the rate on eggs has not only resulted in opening up new outlets for eggs produced in the North-West Frontier Province but has also increased the long distance traffic of the railways So far as cattle are concerned a concessional rate of Re 0 2 9 per wagon per mile introduced by the G I P Railway in 1937 resulted in 64 wagons being despatched from Singaji Fair in the Central Provinces as against 6 in the previous year and a reduction of 25 per cent in return freight on dry she buffaloes from Bombay to Mehsana increased the number of wagons from 42 in 1934 to 303 in 1936 There is no doubt therefore that the introduction of special rates will help to expand the producers' market and bring more traffic to the railways

The question of bringing about a direct reduction in transport costs by the multiplication of special rates was considered at an early stage of the marketing work. By arrangements with the Imperial Council of Agricultural Research and the Railway Board the agents of Class I railways were asked to undertake experiments in quoting special reduced rates for a particular commodity from one area to another provided that thereby the movement of that commodity could be stimulated to the general benefit of both producer and consumer and also railway revenues. They were also asked to get into touch with local Directors of Agriculture and Marketing Officers in order to explore the possibility of finding new markets and in consultation with them to take such steps on the lines indicated. As a result of subsequent discussions with the local marketing officers many reduced rates have been introduced and the following cases may be quoted as examples.

The North Western Railway reduced the freight on graded eggs from 1/2 to 1/3rd parcel rates from Pabbi to Lahore, Delhi, Karachi, Hyderabad (Sind) and later to Bombay and made a similar concession on ungraded eggs from the producing areas, *viz.*, Dargai, Mardan and Havelian to the main grading centre at Peshawar. This railway has also recently allowed 1/6th parcel rates for return empties.

The East Indian Railway reduced the freight on fruits and vegetables from 1/2 to 1/3rd parcel rate in September 1936, and recently introduced ¼ parcel rate on cauliflowers sent to Howrah.

The Eastern Bengal Railway reduced the freight rate on parcels of oranges booked from Siliguri to Calcutta from Rs. 1-4-0 to Re. 0-14-0 per maund and also reduced the freight on outward traffic on oranges from Sikkim.

The Madras and Southern Mahratta Railway have allowed concessional rates this year on limes sent to Calcutta from Katpadi, Venkatagiri, Nellore, Tenali, Bezwada and Palakot.

The South Indian Railway granted in July a small reduction in the freight on eggs (from Rs. 2-5-0 to Rs. 2-3-0 per maund) sent from Kottarakara to Madras, and H. E. H. the Nizam's State Railway introduced from January 1937, a special concessional rate of Rs. 2-3-9 per maund on wet hides from Agra to Madras.

It will be observed from the examples given that most of the railways have shown a ready response in regard to the introduction of special rates on particular commodities.

A closer contact in this respect between the marketing staff and the railway authorities would be in the interests of the producers and trade, and it is suggested that to secure this, the Senior Marketing Officers in Provinces and States should arrange to meet the Commercial Officers on railways as frequently as possible, and that the Indian Railway Conference Association might be asked to consider inviting the Agricultural Marketing Adviser to attend meetings of their Commercial Committee for Interchange whenever subjects pertaining to the marketing of agricultural produce are under consideration.

Certain improved facilities would tend to bring about a reduction in the cost of transport, for example where special wagon rates are in force on certain railways the minimum quantity is relatively high and the forwarding of mixed consignments is not allowed. The question of making a

further reduction in the minimum load requires consideration and the forwarding of mixed consignments so long as the commodities are of the same class should be encouraged. The introduction of special rates in respect of a lower minimum maundage would obviously assist producers who are as a rule small consignors.

Marketing Officers in the Provinces might well be instructed to get into touch with the Commercial Officers on railways, with a view to ascertaining what could be done to meet the requirements of the trade in regard to these matters.

The auxiliary services for the systematic collection and delivery of produce could be usefully extended. A system of street delivery has recently been introduced by the N. W. R. in Lahore and Delhi. The service applies to parcels weighing less than 5 maunds and booked by passenger train. The freight *plus* a small additional charge is payable on delivery except in the case of perishables which must be prepaid. A similar service is provided by the G. I. P. Railway in Bombay. The E. I. Railway in Calcutta has provided a system for the collection of parcels and for the collection of produce from the Calcutta Cold Storage, on payment of an extra charge.

The cost incurred by merchants and others in taking delivery of large consignments at stations is sometimes fairly high particularly where the *Chaudhari* system is in vogue as, for example, at the Howrah goods depot in Calcutta where rates are comparatively higher than at Kidderpore Docks which is a free point worked by a number of competing contractors.

It would appear that the system of collection is capable of development and also the delivery system for small parcels which should, if possible, be extended to include wagon load consignments.

Certain improved rail facilities would help considerably in reducing the total costs of distribution apart altogether from the question of railway freight. The marketing surveys have shown that considerable wastage of produce occurs in the course of transit and that much of this could be avoided by the provision of proper facilities. At one important station in Bihar the loss in respect of linseed trans-shipped from narrow to broad-gauge is estimated at 1 per cent, principally owing to the absence of transit sheds to protect the produce against the elements aggravated perhaps to some extent by the condition of the gunny bags used.

A large quantity of some of the important fruits and vegetables such as bananas, mangoes and potatoes are carried in goods wagons and wastage up to 25 per cent. has been observed. This is owing to the fact that no shelving is provided in the wagons so that the produce at the bottom becomes crushed and damaged. Further iron wagons get so hot that much of the fruit becomes over-ripe and unfit for sale.

The possibility of introducing express goods trains for certain traffic seems also indicated. For instance it takes a goods train 5 or 6 days to cover the distance between Nagpur and Delhi (670 miles).

Damage in transit is due also in many cases to defective containers. Experiments on improved containers for oranges have been tried and in the case of eggs it has been shown that wastage can be reduced by at least 4 or 5 per cent. through better packing. Apart from the N. W. R. so far

as is known no other railway appears to have taken any steps in the way of designing and providing cheap light containers to producers and merchants.

Briefly the marketing surveys have brought out the following points in regard to rail transport:—

(*i*) The possibilities of expanding producers' markets and effecting a direct reduction in transport costs by the introduction of special station to station rates. These are capable of being multiplied in number through closer contact between local marketing staffs and local railway administrations.

(*ii*) Certain improved facilities might be introduced to bring about a reduction in transport charges on primary products by through rates, expansion of the collection and delivery services, the reduction of minimum wagon loads and the introduction of Owners' risk rates on certain primary products, and readjustment of the rates on unmanufactured and manufactured products so that the incidence of the freight should more nearly approach an *ad valorem* basis.

Road Transport.

Freight rates by road are frequently lower than by rail but the marketing surveys do not show whether road services are always run on economic lines, but even in cases where the rate by motor lorry is higher than by rail the traffic goes by road. For example, between Okara and Lahore—a distance of 80 miles—the rate per maund by lorry is Re. 0-3-6 as against Re. 0-2-11 by rail but even so the use of motor lorries is preferred since it enables direct collection from senders and delivery to buyers and also avoids the formalities connected with the booking of goods at the railway stations.

Road transport also has its drawbacks. It has been observed, for example, that some local bodies collect taxes on vehicular traffic carrying agricultural commodities, *e.g.*, ghee, oilseeds, oilseed grain, etc., even when the produce is not intended for sale within their limits and the roads are not the property of the local body concerned. For example, all traffic in agricultural produce on the Lucknow-Cawnpore road is subject to terminal tax at Unao by the municipality and a bullock-cart of groundnuts taken from Hasanganj to Cawnpore is charged a terminal tax of Re. 0-4-0 at Unao and a terminal tax of Re. 0-8-0 at Cawnpore. Similarly, a lorry load of ghee from Khurja to Delhi is charged toll tax first at Sikandrabad, then at Ghaziabad and ultimately at Delhi although the road from Khurja to Delhi is the Grand Trunk Road.

The marketing surveys show that owing to the amount of such charges traffic is driven into round about channels and the costs of distribution are increased. Large wholesale distributors are able to make arrangements for avoiding the payment of such tax by establishing their distributive warehouses outside the bounds of the areas concerned. Individual primary producers are at present unable to escape such impositions and if municipalities are unable to reduce the amount of such charges it will apparently

be necessary in the long run for agricultural producers to organise themselves and operate their collecting and distributing centres outside the towns.

The multiplicity and amount of tax on through traffic might be commended to the attention of local self-government departments in respective Provinces and States. At the same time the incidence of municipal octroi duties or terminal taxes on primary producers should be examined.

SUBJECT NO. 3 (*b*).

Correlation of agricultural production and marketing with a view to the production on the type, quality and quantity required.

(*Note by the Agricultural Marketing Adviser*).

To extend the market for Indian produce and increase the agricultural income of this country more attention must be paid to the type, quality and quantity of produce put on the market.

The need for long staple cotton has long been recognised, but it is not generally appreciated that special types are also in demand in the case of every other commodity. For example, hard wheat is preferred to soft, "bold" linseed commands a premium over "small", and the market preferences are quite as strongly marked in the case of such commodities as wool, tobacco, fruits, coffee, etc.

The importance of producing the right type and quality may be appreciated from the fact that flue-cured Virginia tobacco grown in the Guntur district sells at about Rs. 200 per candy of 500 lb., but the ordinary sun-cured country tobacco is only worth Rs. 50 per candy in the same district, and even between first grade and second grade Virginia tobacco the difference is as much as Re. 0-2-0 to Re. 0-4-0 per lb.

It might be expected that such price differences in themselves would be a sufficient incentive to ensure the production of the right type and quality, but commercial quality is an elusive factor and not immediately obvious to the producer. Some grapes, for example, are good for eating in the locality where they are grown, but cannot stand transport to distant markets. Again, certain types of fruit may be good to eat but useless for canning and *vice versa*. The producer, therefore, needs to be educated and induced to produce the right type and quality required.

Mixed produce of any kind generally sells at a discount so that uniformity in the type produced in an area is important, but it is equally important in many cases to have a minimum quantity. For example, a sufficiently large quantity of uniform type and quality is essential, particularly where it is proposed to develop allied industries. For example, before a factory for the canning and bottling of fruits or vegetables or for the preparation of fruit syrups can be successfully run, a sufficient quantity of the right type of produce must be available in the neighbourhood to keep the factory running for a reasonably long period each year. In establishing a factory for the preparation of dried and frozen eggs, it would be essential for the success of the scheme to have a fairly large turnover daily and this would require a very much greater local production of eggs than is to be found at present in even the most concentrated areas. It is therefore necessary on occasions to stimulate the production of those products or types of products where marketing opportunities have been brought to notice.

It seems clear from the marketing surveys already completed that one of the first essentials would be to scrutinise and check the present method of collecting and preparing local statistics (and forecasts) in regard to the acreage, production and supplies of agricultural, horticultural and animal husbandry products. In regard to commodities such as tobacco, where the different types have quite different markets, no

attempt is made to collect any statistics regarding the production of the distinct types This fundamental question needs attention

In the case of one major crop, namely cotton, the question of improving statistics and of encouraging the production of those types and varieties most in demand has received continuous attention from the Indian Central Cotton Committee for the past 15 years with substantial results The newly established Indian Central Jute Committee has started work on the technology of jute with a similar objective, whilst special committees exist for lac and coffee But for the majority of the crops produced in India, and for the whole of the animal products, there is at present no organisation of a similar character Clearly such central committees cannot be multiplied indefinitely, nor are all the problems involved capable of being tackled by such a form of organisation, but the fact remains that the agricultural and animal husbandry officers in the various Provinces and States concerned with the improvement of production have at present, no direct liaison with the marketing officers though they control fairly numerous staffs and assistants engaged in the introduction of improvements in varieties

It is suggested for consideration that it might be of great advantage if in each Province and State there could be appointed a Crop Development Officer and Livestock Development Officer, who would work directly under the Director concerned and whose duties would be to initiate and control schemes for

(a) encouraging the production of those types of produce which are mainly in demand and which are suited for commercial development,

(b) encouraging increased production of those commodities for which the marketing surveys have shown openings to exist,

(c) following up from the production aspect the other results obtained from the marketing surveys

Notes are attached by the Agricultural Expert and the Animal Husbandry Expert, Imperial Council of Agricultural Research, on the subject

---

Note by the Agricultural Expert Imperial Council of Agricultural Research

Control of quality in crops may be held to imply control of the following factors

(1) Variety,

(2) Seed Supply,

(3) Cultivation methods and

(4) The soil on which the variety may be grown

As regards *variety* there is generally for a particular area, a variety which is more suitable agriculturally and commercially than any other, and it is worth while to attempt to get a solid block of that variety This means the weeding out of all other varieties, and making sure that any new planting or sowing shall be done with the chosen variety only In Germany last year the number of wheat varieties allowed to be grown

was cut down from over 100 to about 12. In the grape-fruit growing areas of California, there has been an elimination of all except a few varieties, of which the Marsh variety is probably the best known. The next thing requiring control is the *seed supply.* In India we have had several excellent seed supply schemes, all in connection with cotton. These schemes differ in details, but are of the same general structure. This structure is well illustrated in the pure seed production and multiplication scheme for Sind outlined by Rao Saheb K. I. Thadani at the First Conference of Research Workers on Cotton in India (March 1937). It is as follows:

Stage.	Area in acres.	Location.
Seed patch (sown with self-fertilised seed obtained from the plant breeder)	2½	Agricultural Research Station.
Increase Block	25	Government Farm.
Field Scale Planting	250	"A" class registered growers.
Village Groups	2,500	"B" class registered growers, co-operative organisations, etc.
District Groups	25,000	General cultivation.

Each stage is fed from the preceding one. The first three stages are under direct departmental supervision, and the crop in these stages is rogued (*i.e.*, all plants not true to type are removed) by departmental officers. The produce of all stages of the scheme is ginned under the strict supervision of the Agricultural Department. The above is a unit of multiplication and in 1937 eleven such units were working in Sind, seven being devoted to the Sind-American Cottons (Sind Sudhar and Sind 4F-98), three to Sind Desi cotton (Sind N R) and one to Sind Sea Island and Boss III-16 (the so-called Quality cottons). In the southern Maratha Country of the Bombay Presidency similar schemes have been in action for many years for the distribution of the cotton varieties Jayawant and Gadag I.

An organisation of this kind could be applied to any crop. Expenditure is required on a trained departmental staff entirely devoted to the scheme and on certain incidental expenses such as bags, storage space and labour. Agreements have to be made with registered growers of the "A" and "B" classes, who must be personally known to the departmental staff, and such growers must not lose on their work for the scheme. The buying and selling price of seed within the scheme is a point that demands careful planning in advance. In addition, where private agencies are used for sale of the seed it may be necessary to allow a small commission on the sale of the improved seed.

For the multiplication of improved seeds or plants, private agencies are largely used in certain countries, the growers being subject to strict inspection and their produce certified. In New Zealand certificates are given (in the form of labels) for the potatoes of certain approved growers, and in the case of small lots of seed potatoes, the packages are actually packed, labelled and sealed under departmental supervision.

In New South Wales, there is a Co-operative Bud Selection Society—a limited company formed under the aegis of the Department of Agriculture and consisting of representative growers and nurserymen. It provides buds from specially selected trees. These buds are given to

special nurserymen who bud them and the plants so prepared are available for growers in a fortnight The total number of buds given out in the year 1935 was 40 000 The Society makes no profits

In the Bombay Presidency the Government Horticulturist (Dr G S Cheema) started some years ago a system of voluntary registration of nurserymen This involved inspection of their produce by the Agricultural Department

In such seed or planting schemes there has not as a rule been any attempt to influence *cultivation methods* but there is no reason why this should not be done It could be made one of the terms of agreement with the A and B growers and their holdings could be used for purposes of demonstration to growers in general cultivation (the final stage of the scheme) Such cultivation methods might include the use of a particular *manure* and if so the departmental organisation could arrange for its purchase in bulk and for its distribution at fixed prices to growers In the Deccan Canal areas of Bombay water was given free for several years for the growing of *san* hemp as *green manure for* sugarcane

The most difficult part of any control programme would undoubtedly be the control of the *type of land* on which a crop might be grown It stands to reason that no one would be registered as seed grower or nurseryman whose holding was on unsuitable soil In the case of general cultivation however the prohibition of the growing of a *particular crop on a particular soil demands rather unusual powers* Such powers used to be exercised by the Irrigation Department in the Bombay Presidency who refused water for lands which were considered unsuitable for sugarcane

The question is really a part of the larger problem of *land use* a problem which comes up in some form or another in nearly every aspect of rural development

Failing any special powers one must resort to propaganda and this could be effectively reinforced by grading as produce from poorer soils and unsuitable areas would always be marked below produce from better situations

Crop quality control like crop marketing can and should be based on accurate information got from special surveys and from the accumulated wisdom of the Provincial and State departments of agriculture As a small example of the kind of thing that has been done may be mentioned a programme made in 1933 for one of the counties of South Carolina This was based on an economic study (embodied in South Carolina Experiment Station Bulletin 288) which went in detail into cultural methods and standards for all the major crops A soil survey was also made In the development programme are projects for the production of certified farm seeds the production of cowpea hay (in connection with newly established marketing standards for that commodity) the reduction of the number of cotton varieties and the improvement of sweet potatoes This work was in charge of a specially employed agriculturist and of the county agent of the department of agriculture

Similarly for crop quality control in India it would seem essential to have special officers in charge of such work

Addendum I to Note by the Agricultural Expert, Imperial Council of Agricultural Research.

In the Southern Division of the Bombay Presidency, an organisation combining the supply of pure cotton seed and the auctioning of the pure produce has been working for several years with considerable success. A comprehensive and ambitious revised scheme which aims at covering $7\frac{3}{4}$ lakhs acres with Jayawant cotton (from seven centres) and $1\frac{3}{4}$ lakhs acres from Gadag No. 1 cotton (from two centres) is now in its third year. The organisation for the supply and multiplication of the pure seed is somewhat similar to that already mentioned for Sind *i.e.*, the Cotton Breeder supplies the pure self-fertilised seed and a Government Farm multiplies that seed. This is further multiplied in the districts in three further stages by co-operative societies and individual agents and then goes into general cultivation. The produce of these stages is brought separately to the marketing centres and is graded and sold by auction. At the time of auction, a condition is made with the buyers that they shall gin the produce of each stage separately under the supervision of the cotton staff and sell the seed at the market rate to a co-operative society or agent working with the Agricultural Department. Societies and agents undertake to purchase, stock and distribute pure pedigree seed of different stages by opening depots in various places and they get a subsidy of annas 4 per bag of 100 lb. and annas 6 per bag of 140 lb. of seed. They advance money to the cultivators and collect the produce of the reserved areas for auction sales and get commission both from the seller and the buyer. The cultivator gets a higher price for his cotton in the auctions and the buyer gets a better quality of cotton. The cost was estimated at Re. 0-1-4 per acre for Jayawant cotton and Re. 0-1-3 for Gadag No. 1 cotton. The actual costs incurred in two years are very close to these estimates. For the whole scheme the estimated cost for five years is Rs. 2,11,436 in the case of Jayawant and Rs. 58,228 in the case of Gadag No. 1 cotton. The Indian Central Cotton Committee is bearing 75 per cent. and the Bombay Government 25 per cent. of the cost.

Addendum II to the note by the Agricultural Expert to the Imperial Council of Agricultural Research.

Orchard Survey as a Preliminary to Quality Control in Fruit.

Between 1927 and 1932 the Department of Agriculture of South Australia carried out an investigation into the nature and condition of Washington Navel Orange trees growing in various orange groves of the irrigated area of South Australia. The main objects of the investigation were :—

(1) To ascertain the nature or type of the individual trees and particularly to find out if these were of the true Washington Navel type or otherwise.

(2) To discover the relative productiveness of individual trees and particularly to take note of trees of high productivity, also producing fruit of first class quality, so that these trees could be used as a source of bud wood for propagating purposes, and

(3) To endeavour to discover the reason for variations in the health and productiveness of individual trees and to ascertain if these differences were due to hereditary or environmental factors.

The investigation revealed the existence of a considerable number of trees of an inferior strain which produced per tree only 2/3rds of the yield of true Washington Navel, apart from being of poor quality.

A similar survey would be a sound basis for the development of any orange area in India.

Note by the Animal Husbandry Expert, Imperial Council of Agricultural Research.

Animal Products.

In spite of her livestock being potentially as well as actually one of the largest of the national assets of India, it is a well-known fact that their development and economic exploitation have not received the attention they deserve,—and no appreciable development of this vast industry can take place until more effort commensurate with its size and requirements is made. In the proposals framed below it is suggested that in carrying them out the fullest use should be made of the subordinates of the Provincial Veterinary Departments (including stockmen) and these officials encouraged generally to take more interest in livestock trade, and not confine themselves to the control of disease.

Some remarks on the more important animal industries, excluding fish, are now offered, but it should be borne in mind that owing to their undeveloped state we shall have to start *ab initio* in the case of most of these industries. Those to be considered include the following:

Milk, Ghee. Hides and Skins, Wool, Live Animals and Eggs.

Milk.—It is a matter of common knowledge that though production is abundant in many places there is an unsatisfied demand for pure milk at reasonable prices especially in urban areas. The prices also vary considerably from place to place. An efficient marketing organisation may remedy this defect. A beginning in this direction could be made by the establishment of milk collecting centres in areas of large production. As an illustration the experience of the Allahabad Agricultural Institute in this direction may be mentioned. The Institute has stations at one to six miles away where *gowalas* tie their cattle. There may be up to 100 cows and buffaloes at each station. An employee of the Institute is stationed at each centre. Morning and evening the animals are milked in his presence and the yield of each is weighed and entered on a special form. The Institute buys concentrates at wholesale rates, mixes them in suitable proportions and sells the mixture to the *gowalas* at cost price, the cost being deducted from the payment for milk at the end of every week. These animals are allowed to be served only by the Institute Bull, and all scrub bulls in the locality are castrated. To ascertain the dates of calving a small premium is paid to those who bring their cows to calve at the station.

It is easy to see that if a net-work of such stations were established in suitable places and arrangements made for the proper disposal of the milk, it is bound to have very far-reaching effects in several directions.

Where facilities are available, especially where large consuming centres are not far off, an effort may be made to dispose of as much of the milk in liquid form as possible. This will ensure a supply of ready cash to the producer, which is the greatest incentive to him to feed his animals better. When he gets a remunerative return he is in an agreeable frame of mind and instructions regarding feeding and breeding are readily imbibed and acted upon, and this results in an all round improvement in livestock. It is perhaps clear from the experience of the past that in the absence of any practical aid of this kind, all lectures, pamphlets and other forms of propaganda are largely wasted. To begin with, such centres may be within reach of Government Farms and the subordinates of the Agriculture and Veterinary Departments might be able to undertake the major portion of the work involved, along with their other duties. In course of time Government could gradually withdraw after co-operative societies of villagers have been established for the purpose.

The surplus of milk, left over after sale for liquid consumption, can be separated and ghee may be produced. The separated milk can be utilised for feeding calves or for consumption by the villagers themselves If large quantities of suitable skim milk become available the manufacture of milk powder might be taken up and transported to areas like South India where production of milk is insufficient and prices are high.

Ghee.—In regard to ghee also there is an unsatisfied and almost unlimited demand for pure ghee. The grading system introduced by the Agricultural Marketing Adviser has been quite successful, and these operations should be extended. The opening of milk collecting centres as pointed out above and the eventual establishment of producers' societies on a village industry basis may improve the production and sale of pure ghee. The subordinate staff of the department concerned with livestock development should eventually be able to carry on propaganda in the hygienic production of ghee, as it is hoped, that the Imperial Dairy Institute will conduct experiments on this subject and soon be in a position to suggest improved methods for village manufacture.

Live Animals.—A demand for good stock always exists and there is an urgent necessity for organising and increasing the supply. The establishment of milk collecting centres as pointed out above will automatically lead to the production of more efficient milch cattle, but efforts should be continued and intensified for the improvement of draught breeds.

The internal trade in draught cattle is one of great magnitude in India and it is largely maintained through the agency of cattle fairs which are held periodically throughout the country. A great deal could be done to develop the trade arising in these fairs by investigating the type of animal most in demand, the areas in which such animals are bred and the districts to which they are taken.

Contagious disease is another important factor in the internal as well as the external trade in livestock. In this connection the Animal Husbandry Bureau of this Council is at work on the construction of a map of cattle routes. When this is complete a clearer picture of the internal cattle trade will be available and it will be possible to introduce measures to prevent disease infection arising *en route* to cattle fairs and the spread of contagious disease from one province to another.

Annual shows held at suitable centres for the best known breeds, including the *award of prizes* and *sanads* to deserving exhibits, would encourage breeders and help them to get good prices for outstanding animals Arrangements have already been made for the holding of an all India Cattle Show every year

Hides and Skins—In regard to these important commodities the grading work which has proved so successful should be extended This should be accompanied by measures for the control of animal diseases, the warble fly pest, etc, and propaganda is *needed regarding the best* methods of marking animals, flaying and the subsequent treatment of the hides The establishment of village flaying centres, which was recently suggested to Provinces would go a long way in improving the value of the raw product, and the provision of demonstration flaying parties to visit these centres is to be encouraged

Wool—Very little is at present known regarding the structure of Indian wools and the actual requirements of consumers of wool for particular trades Efforts are required to organise the raw wool trade on better lines *and introduce standards and possibly grading centres for this* commodity

Eggs—As a *result of the* Egg Marketing Report it is clear that the poultry and egg industry is one of the most promising in India and in some areas it may be possible to set up factories for the commercial exploitation of eggs if the supply can be greatly increased One method of encouraging production would be to supply such institutions as Veterinary hospitals in selected areas with breeding pens of birds suitable for the locality and also provide them with artificial incubators for hatching eggs in large numbers and for the issue of day-old chicks to those willing to take up this cottage industry on a larger scale

---

Additional note by Mr P J Kerr, M R.C V S, I V S, Offg Animal Husbandry Expert, Imperial Council of Agricultural Research

Mr Ware's notes read in conjunction with those of the Agricultural Marketing Adviser and Agricultural Expert clearly indicate the need for some form of Joint Agricultural and Animal Husbandry Development Committees in Provinces and States and for the appointment of special Animal and Agricultural Industry Development officers to pursue the policy and programme of the committees as well as to explore and make suggestions for new lines of development

Relatively few cattle are moved by rail but large numbers are driven across country—often hundreds of miles—to market and on the way they not only pick up diseases but spread devastation in the villages *en route* In addition to the improved handling and processing of animal husbandry products, therefore, one of the first problems to be solved in marketing schemes is that of rapid and cheap transport This subject has to be worked out by the committees for the Provincial Governments as both improved road and railway facilities are involved Special transport facilities are necessary for the distribution of supplies to producers as well as for the conveyance of their products to market Molasses and rice polishings (brick) for example, are cheap in the areas where they are produced, but freight costs render their price prohibitive in other relatively near areas

As a Provincial Director of Veterinary Services I have given this problem of the development of markets for animal products much thought for many years. It has been my endeavour to find means to put a little more ready money into the hands of the cultivator—thereby to gain his confidence—so that he may more readily accept advice on the feeding and breeding of animals which take years to show benefit.

The view that the first step towards improvement of products and the animals which produce them is to improve the financial position of the owner by helping to market his present produce more advantageously, is in my opinion the correct one.

I am certain that once appointed it will soon be discovered that more than one Development Officer in each branch—Animal and Crop Industry—could be usefully employed. The work would require, to begin with, the whole-time attention of one officer at least and cannot be delegated to the present Provincial Marketing Officer to be done in his spare time.

The Animal Husbandry Development Officer must be a provincial officer who would work not only under the Director of Veterinary Services but in direct touch with an influential provincial committee which should be able to bring pressure to bear on the Provincial Development Departments and, through the Minister, on the Provincial Government itself.

Subsequent steps of the Development Officer will be directed to the improvement of quality of animal products such as ghee, *khoa*, poultry, etc., by making available to the producer the results of research on his product as applied to his particular circumstances in the village or district where he lives.

D—861 ICofAR—12-5-39—1,000.

CROP PLANNING CONFERENCE, JUNE, 1934.

AGENDA

I.—Rice

Consideration of the following questions :—

(1) Keeping in view the world position, internal consumption, stocks carried over, and decreased exports overseas, would it be correct to state that there is an over production of rice (a) in rice producing provinces or other areas, (b) in India as a whole

(2) If the answer to the first question is in the affirmative what steps are desirable and practicable to deal with the problem—

A By way of restriction of the area under rice

(a) If restriction is recommended, what is the extent of the area to be reduced (if any) in the case of each rice producing province ?

(b) What are the alternative crops that are recommended in the case of each province or part of a province ? What are the difficulties in the way of the substitution ?

(c) In any such change-over, what would be the effects on the Government revenue, both in the shape of land assessment and water rate, and what would be the effect on the land-owner and the cultivator ?

B By way of development of markets (i) external and (ii) internal.

In considering (i) discuss any existing restrictions and the possibility of their removal, also the question of improvements in the quality or milling of the rice

Also consider in both cases the effect of railway and steamer freights

(3) In case of restriction of import of foreign rice into India

(i) What would be the effect of such restriction on competition of foreign with Indian rice in outside markets, and

(ii) What form is retaliation by the countries affected likely to take ?

(4) Is the creation of some organisation necessary or desirable for the purpose of improving and developing the cultivation and marketing of rice ? If so, what should be its functions and composition and how should it be financed ? Should it be permanent ?

II.—Wheat.

Consideration of the same questions as under rice.

III.—Cotton.

All that is contemplated is a general review of the position in order to have a complete picture of India's crops. No questions are set down as the subject is dealt with in detail by the Indian Central Cotton Committee.

IV.—JUTE.

It is suggested that a general review of the jute position would be sufficient as all the relevant issues have been set out in the Bengal Jute Inquiry Committee's Report which is now under consideration by the Bengal Government. The Secretary's note on jute summarises the position.

V.—OIL-SEEDS.

A. *Ground-nut and castor.*

(*a*) In view of the fall in exports of ground-nut and castor seed what measures are recommended by way of development of markets (*i*) external and (*ii*) internal.

In considering (*i*) discuss any existing restrictions and the possibility of their removal ; also the question of improvements in their quality and marketing.

Consider in both cases the effect of railway and steamer freights.

(*b*) In view of the increasing exports of ground-nut oil and castor oil, what steps should be taken to stimulate the oil crushing industry ?

B. *Linseed.*

In view of increasing exports, what steps, if any, should be taken to increase production and improve quality and marketing ?

Consider particularly the possibility of expansion in the Central Provinces, United Provinces and Bihar and Orissa.

C. *Rape and mustard, sesamum and cotton-seed.*

What measures are recommended by way of development of markets, external and internal ?

D. *Linseed, castor, ground-nut, rapeseed and sesamum oils.*

In view of the preference in the United Kingdom, are any steps recommended to stimulate the export trade in these oils ?

E. *Coconuts* are dealt with in a report by the Special Inquiry Officer which is under examination.

VI.—SUGARCANE.

Generally review the position. The matter is being dealt with in detail by the Sugar Committee.

VII.—TOBACCO.

Review the position (*a*) with regard to production of cigarette tobacco and (*b*) of improved varieties suitable for flue curing.

VIII.—FODDER CROPS.

IX.—FRUITS AND VEGETABLES (INCLUDING ROOTS).

X.—CEREALS OTHER THAN RICE AND WHEAT, SPECIALLY, BARLEY, JOWAR, BAJRA, MAIZE AND GRAM (INCLUDING PULSES).

Note by Vice Chairman, Imperial Council of Agricultural Research, on the Proceedings of the Crop Planning Sub Committee of the Advisory Board of the Imperial Council of Agricultural Research

In the following note I have attempted to summarise the conclusions arrived at by the Sub Committee of the Imperial Council of Agricultural Research that has been considering the subject of Crop Planning The full proceedings are available to members that want them

The items are dealt with according to the order in the Agenda paper

I —RICE

(1) On behalf of Madras it was pointed out that there has been a change in the position of rice Ten years ago it was thought that 40 per cent of the population of Madras ate rice and on the assumption that an adult ate 1 25 lbs per day it was supposed that there was a surplus in rice but that was not the position to day There had been a small increase in area but the population had increased by over 11 per cent and many more people were now eating rice than was the case ten years ago Consequently the assumed surpulses of ten years ago do not now exist Madras consumed practically all the rice it produced and there were regular imports from Burma and there was therefore no case of over production

Bombay had to supplement its production of rice by imports from Burma and there was therefore no question of surplus In Sind the production of rice was just equal to consumption

Bengal's production was short of its needs by 1½ lakhs of tons annually and that was supplemented from Burma

The United Provinces were a deficit province in the matter of rice and had to supplement its production from the Central Provinces and Bengal The question of rice was not important to the Punjab

Bihar and Orissa in spite of its large area under rice did not produce enough for its consumption and had to supplement its production from the Central Provinces and Bengal, the latter probably importing from Burma through Calcutta

Central Provinces—As regards the Central Provinces when the crop was a 11 annas crop it was just sufficient for internal consumption When the crop exceeded 11 annas it easily exported the surplus to the adjoining provinces

In Assam the production and consumption were equal

As regards Burma it had normally an exportable surplus of 3 million tons per annum but all the surplus passed at once into India proper, Ceylon, Malaya and the Far East There was a very definite demand for Burma rice and there was no question of over production

It was agreed by the Sub Committee that there was no over production of rice either in India as a whole or in any part of it.

In view however of the fact that the countries of the east which were taking Indian rice, namely Ceylon, Malaya and Japan were attempting to be self sufficient in the matter of their rice production and that the last country had succeeded in becoming self sufficient and also of the competition that Indian rice was meeting with in foreign markets from Siam and

Indo-China in the East and Italy and Spain in the West it was urged that it would be wise to call a halt to a further expansion of the rice area in India. The following proposition was moved and carried by 7 votes against 5 :—

"That in view of the present world conditions in the matter of rice production, no Provincial Government should ordinarily offer any stimulus to an increase in the present area under rice."

The representatives from Bengal, Burma, the United Provinces, Sind and the Central Provinces constituted the minority.

(2) In view of the answer under (1) above no restriction is recommended and the questions under (2) A do not arise.

(2) B. As regards internal markets it was agreed that the development of internal markets was of great importance and that this development could best be pursued by means of the marketing scheme now under the separate consideration of the Imperial Council of Agricultural Research. As regards external markets the Sub-Committee made the following recommendations :—

(*i*) that negotiations should be opened with Ceylon and British Malaya with a view to obtain preference for Indian rice,

(*ii*) that as soon as financial circumstances permit the export duty on rice should be removed,

(*iii*) that the specific duty imposed by the Ottawa Agreement on imports of rice from foreign countries to the United Kingdom should be extended on paddy to the extent of three farthings per lb. At present import of rice into the United Kingdom is subject to a specific duty of a penny per lb. while foreign paddy is taxed at 10 per cent. *ad valorem.* It was pointed out that Spain was increasing her exports of rice in the form of paddy to England in order to get the benefit of this differentiation, and

(*iv*) that Burma and Bengal which produced rices suitable for English and Continental markets should continue their experiments in the matter of improving the quality of such rices.

As regards railway freights the Sub-Committee was informed by Mr. Calder of the Railway Board that a general reduction in the freights on agricultural commodities was not practicable but that where special rates were required to facilitate particular movements of special crops the question would always receive sympathetic consideration. The Railway Board would always consult agricultural officers and the new marketing staff in connection with such proposals.

(3) The Sub-Committee felt that it would not be wise to impose any restrictions on import of foreign rice into India by means of either an absolute prohibition or an unreasonably heavy tariff. It considered however that a reasonable and moderate rate of duty was unlikely to lead to retaliatory measures on the part of foreign governments affected and passed the following resolution :—

"That an import duty at the rate of Rs. 1-4-0 per maund of rice and 15 annas per maund of paddy be imposed on imports of rice and paddy from foreign countries."

(4) The Sub Committee unanimously recommended that it was desirable to have a standing committee of the Imperial Council of Agricultural Research on rice The functions of such a Committee which should be constituted under the Rules and Regulations of the Council should be advisory and its constitution should be on the lines of the other standing committees of the Council It should be financed from the funds of the Council

The Director of Agriculture Madras under instructions from his Government asked that a quota should be fixed for rice which Burma was importing to Madras ports The Sub Committee was of the view that it was wrong in principle to suggest any restrictions on any inter provincial trade within the Indian Empire The proposal was not therefore approved

II —WHEAT

(1) On behalf of the Punjab it was pointed out that in the last ten years the area under wheat had increased by 6 per cent while the population had increased by 10 per cent As regards the yield roughly half the area depended on rain and considering the not infrequent occurrence of bad monsoons the production could not be termed excessive The surpluses of normal years were easily disposed of by export to adjoining provinces and Calcutta The real danger would arise when Sind increased its wheat area to the maximum limit of two million acres The representative from Sind considered that with the normal growth in Indian population the increasing consumption of wheat in preference to inferior grains and the risks to which food crops were exposed by vicissitudes of season it would be unwise to limit the growing acreage under wheat in Sind In any case if the Sub Committee decided that restriction was necessary, it should impose the restriction on an old province like the Punjab and not on Sind For the United Provinces it was stated that with the increase in population the surplus of wheat in that province was nothing serious and was easily absorbed by the deficit provinces in India In the Central Provinces the surplus was about 50 000 tons and there was no difficulty in exporting it to other parts of India As regards Bihar and Orissa it was a deficit province in the matter of wheat and imported wheat for its own consumption from other areas of India Bombay was hardly self sufficient in the matter of wheat production and there was no question of over production The conclusion of the Sub Committee was that there was no over production at present It was however pointed out by one of the members of the Sub-Committee that the internal requirements of India in the matter of wheat amounted to about 9½ million tons annually that no export market seemed possible for several years to come and that in the current year but for unexpected seasonal damage the sown area of over 35 million acres of wheat in India should have produced a crop of about 11 million tons He therefore proposed that something should be done to limit the production to the figure of 9½ million tons He suggested that the area under wheat in India as a whole should be reduced by 2 million acres and thought that on this area linseed and barley could be substituted for wheat with advantage Finally he moved the following resolution —

> "That keeping in view the world position in production and the trade in wheat it is undesirable that the area under wheat in India as a whole should exceed 33 million acres."

This resolution was lost by 6 votes against 4. Then the following resolution was moved :—

> "In view of the world position in wheat and the possible danger of over-production this Sub-Committee recommends that no fresh stimulus should be given to the expansion of wheat cultivation in India and every effort should be made for the substitution of other crops for wheat."

This resolution was agreed to unanimously.

(2) A. In view of the answer under (1) none of the three questions under A arise.

B. As regards external markets, in view of the fact that the carry over of wheat stocks outside India amount to more than a year's requirements of consuming countries, it was agreed that there was not much chance of India being in a position to export any wheat during the next few years. The following answer was returned unanimously :—

> "So long as world prices remained at the present level and the wheat import duty remained at the present level and the wheat import duty remains, there is no immediate prospect of developing external markets for Indian wheat."

As regards internal markets and railway freights the same answer was returned as under rice.

(3) In view of the existence of the wheat import duty the questions under 3 do not arise.

(4) The Sub-Committee unanimously recommended the creation of a Standing Committee on wheat of the Advisory Board of the Imperial Council of Agricultural Research on the same terms as those suggested for the Committee on rice.

III.—Cotton.

The two questions to be considered in connection with cotton, *viz.*, the scope for an increase in the total area and the selection of varieties to be cultivated, were being dealt with carefully by a special Sub-Committee of the Indian Central Cotton Committee. It was not therefore necessary for this Sub-Committee to go into the matter.

IV.—Jute.

All the questions in connection with Jute were, as explained in the printed note circulated to the Sub-Committee, under the consideration of the Bengal Government on the report of their Special Enquiry Committee and the Sub-Committee considered that no action at this stage was necessary.

V.—Oil-seeds.

A.—*Ground-nut and castor.*

(*a*) As regards ground-nut, the Sub-Committee came to the conclusion that there was no need for placing any restrictions on its cultivation, but that there might be room for cautious expansion. With reference to

external markets, in view of the growing competition in the United Kingdom market from foreign Soya Beans and other oil-seeds and from foreign fats and oils, the Sub-Committee passed the following resolution :—

"That this Sub-Committee recommends that the Government of the United Kingdom be approached with a proposal to impose an import duty on all foreign fats, oils and oil-seeds which compete with oil-seeds produced in the Empire."

As regards castor seed, the Sub-Committee considered that its position was satisfactory and that there was room for its development rather than for its restriction. The Indian Oil Crushing Industry Committee of the Imperial Council of Agricultural Research was dealing comprehensively with the questions of the improvements in the quality and marketing of all oil-seeds and these questions may safely be left to that body.

(*b*) It was pointed out that there had been great increases in the export of groundnut oil, especially to the United Kingdom, after the grant of the Ottawa Preferences and that the question of stimulating the industry might be left to the Indian Oil Crushing Industry Committee of the Imperial Council of Agricultural Research.

B.—*Linseed.*

The large increases in the exports of linseed to the United Kingdom since the grant of Ottawa Preferences were pointed out and the Sub-Committee emphasized the need for extending the cultivation of linseed in India, especially of the improved rust resistent varieties. It was also agreed that the favourable position in regard to linseed should be made widely known amongst cultivators and merchants.

C.—*Rape and mustard, sesamum and cotton-seed.*

So far as foreign exports were concerned the resolution referred to under A (*a*)—Groundnut—would cover the case of these oil-seeds The question of developing internal markets should be left to the Indian Oil Crushing Industry Committee of the Council.

D.—*Linseed, castor, ground-nut, rapeseed and seasamum oils.*

Complaints had been made by merchants in Bombay that facilities for tank wagons on railways and tank accommodation on steamers and facilities for storage of these oils at the Indian sea ports were lacking. The Sub-Committee resolved that action should be taken to improve the position in these respects.

VI.—SUGARCANE.

The following resolution was adopted :—

"From the point of view of general crop-planning the sugarcane area in India is not so large as to affect the general question. There is insufficient knowledge of the production and consumption of *gur* to enable the Sub-Committee to make any specific recommendation regarding the maximum sugarcane area."

VII.—Tobacco.

The Sub-Committee considered that there was ample scope for an expansion of area under tobacco provided it was of the right type. The bulk of tobacco produced in India was consumed in India itself ; this was the heavy type of tobacco. What India required to develop was the light bright tobacco which was suitable for cigarettes. The Committee noted with satisfaction the progress made in this direction and considered that this crop could be adequately dealt with by the Tobacco Committee which was shortly to be formed by the Council.

VIII.—Fodder crops.

It was considered that there was great scope in India for an increase of fodder crops but that propaganda for this purpose would be ineffective unless an incentive was given to the ryot to grow fodder where it was not now grown. The Committee was of opinion that this could best be done by a stimulus to the indigenous dairy industry. The following resolution was passed :—

> " In order to develop and organise the Indian dairy industry this Sub-Committee recommends that a protective duty be levied upon all imports of dairy products which are or can be produced in this country."

IX.—Fruits and vegetables (including Roots).

The Sub-Committee noted that at the present moment all the provinces were making special efforts to extend and improve these crops and considered that their efforts should be co-ordinated more than they were now.

X.—Cereals other than rice and wheat, specially barley, jowar, bajra, maize and gram (including pulses).

It was considered that statistics in respect of these crops were extremely insufficient and the Sub-Committee commended to the Government of India the possibility of including the crops mentioned under this subject in the all-India Forecasts.

General.

In view of the Sub-Committee's decision not to recommend any restrictions on the present areas under rice and wheat, the question of suggesting substitutes for these crops did not arise. The Sub-Committee however considered that in the interest of sound crop planning the question of alternative crops should be discussed. It was pointed out by one of the Local Governments' representatives that there was no possibility of taking any steps in this direction during the coming year. It was a matter not for one year or two but at the lowest for ten years. The following suggestions were made :—

(i) *Madras.*—Madras could increase its area under cambodia cotton by 50,000 acres. It could put in another 50,000 acres under sugarcane in the next three or four years by which time Madras considered it would be self-supporting in the matter of sugarcane. In the last five years it had increased the area under plantains by 14 per cent. It could increase its area still further if the railways would agree to

grant concessional rates for fruits and facilities for their transport

(ii) *Bombay*—Bombay considered that the area under sugarcane, mangoes, plantains and pine apples could be increased

(iii) *Bengal*—Bengal had recently increased its sugarcane area but there was scope for some more increase It could also increase its area under fodder crops as a ready market for milk and milk products existed in Calcutta What was required was a stimulus to the Indian dairy industry

(iv) *United Provinces*—In the United Provinces there was room for a high quality of barley suitable for malting It could increase the area under linseed with proper rust resisting varieties and also under san hemp

(v) *Punjab*—In the Punjab there was no information available about substitute crops except in respect of Soya Bean in the case of which prices were however very low The Sub-Committee suggested that an experimental consignment of suitable soya beans of uniform variety should be sent to England

(vi) *Burma*.—As regards Burma it was pointed out that the only alternative crop possible is sugarcane and the maximum limit to which this could be increased was 100 000 acres even under favourable conditions

(vii) *Bihar and Orissa*—Bihar and Orissa was hoping to show a further increase under sugarcane Its autumn rice in unprotected areas in Bihar proper was precarious and it was quite prepared to replace it by more remunerative crops If protection is afforded to the Indian dairy industry the Province would gladly go in for fodder crops for which there is a great need It could also increase its area under linseed with efficient marketing

(viii) The Central Provinces are already taking steps to increase the area under linseed but there were difficulties chiefly connected with the price in this connection It could also increase the acreage under groundnut and sesamum

(ix) Assam thought that there was scope for the expansion of area under linseed and sugarcane

The Sub Committee was of the opinion that one great obstacle in the way of alternative crops was the absence of inducement to the ryot to grow them It thought that some security should be afforded against competition from foreign countries and passed the following resolution —

"That in order to promote the more efficient production and marketing of Indian agricultural produce, this Sub Committee recommends that the Government of India should consider the advisability of imposing protective duties on the imports of animal and agricultural produce which compete with home grown produce"

In order to improve agricultural statistics the Sub-Committee also made the following recommendations :—

(*i*) that in the monthly railborne trade returns figures should be given by trade blocks instead of by provinces only ; also that the value of commodities should be given if practicable, and

(*ii*) that the railway freights for agricultural commodities from and to representative centres should be published in the weekly Indian Trade Journal. The Railway Board's representative thought that there would be no difficulty in accepting this recommendation.

PROCEEDINGS

Friday, the 8th June 1934.

The Crop Planning Conference met in the Members Room of the Legislative Assembly Chamber at 10 a m, the Hon'ble Khan Bahadur Mian Sir Fazl i Husain in the Chair.

In opening the proceedings of the Conference, the Chairman made the following remarks ·

Gentlemen Before we proceed with our work, I think I ought to welcome you to Simla Representatives from Madras, Burma and Assam have had a very long, tedious and probably troublesome journey to get through, and those of you who have been at work during the last three days in the Advisory Committee have not had, I think, time to get any rest after your arduous journey. From what I have seen of the Agenda it seems that there is not much rest in store for you during the next two days However, my apology for giving you all this trouble to come these long distances is the extreme importance of the work that is to be done by this Conference We know too well the gravity of the situation We also know that for some three years or more the situation has been very grave and the hopes that were at one time entertained of this wretched economic depression passing away have not been realised Some people who are not as optimistic as others are inclined to the view that we must not treat this economic depression lightly and make ourselves believe that it is but a passing phase but that we had better deal with it seriously and see what, if anything, can be done From time to time people have been urging the raising of the prices If we can raise the prices, the whole trouble will be over. When news comes to India from other great countries of the heroic efforts that are being made to raise the prices, naturally we ourselves as well as the masses feel, " If other people are trying to raise the prices, why should we not do the same ? " From time to time suggestions have been made of altering the exchange ratio and increasing the currency and I have no doubt the members of the Conference are fully aware of the fact that these possibilities have been most carefully considered, and it is only because it has not been found possible to proceed along those lines that no particular action has been taken The third possibility that has been suggested is Is there not something wrong in the crop planning of India ? Is the area under cultivation in India being put to its best possible use, producing the largest possible amount of wealth ? Is it not possible that there might be some commodities which are over produced or some commodities which are not produced in sufficiently large quantities ? If so, there must be a re adjustment This is really the subject which this Conference has been called to discuss The immediate cause of calling this Conference was certain discussions which took place when the Provincial Economic Conference met in Delhi I believe some of you were present in that Conference There the question of rural indebtedness was taken up and kindred subjects were also discussed There a number of representatives from various provinces urged that possibly relief might be obtained if the

In order to improve agricultural statistics the Sub-Committee also made the following recommendations :—

(i) that in the monthly railborne trade returns figures should be given by trade blocks instead of by provinces only ; also that the value of commodities should be given if practicable, and

(ii) that the railway freights for agricultural commodities from and to representative centres should be published in the weekly Indian Trade Journal. The Railway Board's representative thought that there would be no difficulty in accepting this recommendation.

PROCEEDINGS

Friday, the 8th June 1934.

The Crop Planning Conference met in the Members Room of the Legislative Assembly Chamber at 10 a m, the Hon ble Khan Bahadur Mian Sir Fazl i Husain in the Chair

In opening the proceedings of the Conference, the Chairman made the following remarks

Gentlemen Before we proceed with our work, I think I ought to welcome you to Simla Representatives from Madras Burma and Assam have had a very long tedious and probably troublesome journey to get through, and those of you who have been at work during the last three days in the Advisory Committee have not had I think time to get any rest after your arduous journey From what I have seen of the Agenda it seems that there is not much rest in store for you during the next two days However, my apology for giving you all this trouble to come these long distances is the extreme importance of the work that is to be done by this Conference We know too well the gravity of the situation We also know that for some three years or more the situation has been very grave and the hopes that were at one time entertained of this wretched economic depression passing away have not been realised Some people who are not as optimistic as others are inclined to the view that we must not treat this economic depression lightly and make ourselves believe that it is but a passing phase but that we had better deal with it seriously and see what, if anything, can be done From time to time people have been urging the raising of the prices If we can raise the prices the whole trouble will be over When news comes to India from other great countries of the heroic efforts that are being made to raise the prices naturally we ourselves as well as the masses feel "If other people are trying to raise the prices why should we not do the same ? From time to time suggestions have been made of altering the exchange ratio and increasing the currency and I have no doubt the members of the Conference are fully aware of the fact that these possibilities have been most carefully considered and it is only because it has not been found possible to proceed along those lines that no particular action has been taken The third possibility that has been suggested is Is there not something wrong in the crop planning of India ? Is the area under cultivation in India being put to its best possible use producing the largest possible amount of wealth ? Is it not possible that there might be some commodities which are over produced or some commodities which are not produced in sufficiently large quantities ? If so there must be a re adjustment This is really the subject which this Conference has been called to discuss The immediate cause of calling this Conference was certain discussions which took place when the Provincial Economic Conference met in Delhi I believe some of you were present in that Conference There the question of rural indebtedness was taken up and kindred subjects were also discussed There a number of representatives from various provinces urged that possibly relief might be obtained if the

possibilities of suitable cropping were examined. These suggestions were taken up by us and the Council of Agricultural Research set itself the task of collecting all relevant material. I believe that material has been circulated to all the honourable members of the Crop Planning Conference under the heading "Statistics and Graphs". Of course, this is just a mass of statistics but I have no doubt that with your expert knowledge of these affairs you will be able to draw inferences from them and perhaps formulate schemes. Then there are a large number of notes written by Directors of Agriculture from different provinces and these afford the most valuable material for the consideration of this Conference. Then there are three or four notes on some important subjects like jute, sugarcane and cotton, subjects which are already being dealt with by special committees of an All-India nature or, at all events, of a nature on which all interests relating to that subject are represented. Therefore, it is not necessary for me to detain this Conference for any length of time. Here we have a mass of material which was presented to the Advisory Committee, which was requested to deal with an agenda and give advice on the various items covered by that agenda. I believe the proceedings of the first day and of the second day of the Conference have already been circulated to honourable members. The proceedings of the third day will probably be circulated by this afternoon, and we are indebted to the Vice-Chairman of the Council for the Note which he hurriedly prepared last night and which I believe has also been circulated. Some members may have had time with their early breakfast to have glanced at it: others may not have had time. I think the best course for the Conference to pursue would be to take up this agenda (pages 5-6 *ante*) and, in the light of that Note (pages 7-14 *ante*) and the proceedings of the first day of the Committee, to proceed to deal with this agenda. Unless there is a suggestion different from this, this is the course I intend to pursue.

The first item on the agenda is Rice—consideration of the questions set down. I believe Members have this agenda before them. I believe it would be best if opinions on the subject were expressed by Provinces rather than by individuals. I shall be glad to hear Madras on the subject.

Mr. H. M. Hood.—Sir, the first question is whether in the opinion of the Madras Government there is over-production of rice: and I think I can answer that question on behalf of Madras very briefly indeed. The Madras view is, very emphatically, that so far as the Madras Presidency is concerned, there is no over-production of rice. The area under rice is about 30 per cent. of the total cultivated area. That percentage has not increased materially. In fact I think it has slightly diminished in the course of the last ten years. The actual area under rice has slightly increased, the production has accordingly increased to a certain small extent over that period, but it has not increased anything like as much as has the population of the Presidency; and the Madras Government think there can be very little question that so far as this province is concerned, there is no such thing as the over-production of rice.

Chairman.—Perhaps there are a few points some members would like to be more definite about. It is stated, for instance, that an adult in Madras eats 1.25 lbs. per day of rice. Is that correct?

Mr. H. M. Hood.—That is the figure taken from the jail rations.

Diwan Bahadur T Raghaviah—Ordinarily the Madras prisoner does not get rice every day but he is allowed rice every day for certain special reasons The scale allowed is 1 25 lbs per day. He also gets some vegetables, dal, and gingili oil in addition

Mr H M Hood—According to the experiments of the dietetic experts (Col McCarrison for instance) they have put down the requirements of an adult at about a pound and a half of cereals a day, but that is in addition to vegetables, I believe and other articles of diet But in the case of the Madras ryot and the population at large, they do not get the extra vegetables and so forth to a material extent because they cannot afford to and the actual production of cereals in the Presidency including imports provides, I think, only for about 1 3 lbs of cereals per adult head of the population That is a very clear indication that we do not produce more than is required, though it is possible one might produce more than people could afford.

Rai Bahadur B. B Mukharji—So far as Bengal is concerned, it has already been seen that we fall short of the requirements of consumption by near about one and one fourth million tons Bengal, as you are all aware is very well suited for rice production We have got a climate suited for it, and a rainfall quite suited for it, the cultivators are good experts in the production of rice, and yet we sow about 48 per cent of the total cultivated area with rice, and we are already short of the total amount that we need for our home consumption and we do import from Burma and other places mainly from Burma So there is unquestionably no over production, on the other hand, we are already not quite self contained, and we would very much like to be self contained, and there is hardly any room for reduction in the area

Chairman—Who produces rice cheaper—Burma or Bengal?

Rai Bahadur B B Mukharji—I am quite sure that our rice is much finer, much sweeter and at the same time more nutritious, as a matter of fact Burma rice is only taken by our people as a matter of dire necessity If we can get our own rice, our people would not like to take Burma rice

The Hon'ble Sir Miles Irving—The Punjab is not seriously interested in rice It is there grown as a luxury article The finer forms are grown in a few favourable localities Commercially, we cannot say that we are seriously interested in the production of rice

Dr W Burns—In Bombay Presidency proper excluding Sind out of about 29 million acres there is something in the neighbourhood of 1,900 000 acres under rice, and we produce about 840 000 tons of rice But in addition, there are imported into Bombay about 255 000 tons of rice by coasting vessels which come into Bombay That figure includes not only Bombay Presidency but also Sind But even assuming that only half of that comes into the Bombay Presidency it is obvious that our own requirements are not nearly made up by that which is produced in the Presidency itself

Mr W J Jenkins—As far as Sind is concerned the position at present is that we are more or less supplying our own internal requirements The present acreage under rice in Sind is roughly a million acres Half of this area is grown on the Lloyd Barrage Canals, mainly the Rice Canals

and half on the old inundation canals in Upper and Lower Sind. The development of the area under the Lloyd Barrage will not make any appreciable difference to the acreage under rice in Sind. The total increase of rice area with the full development of the Barrage lands will not be much more than a lakh acres. Small amounts of rice are exported from Sind. These exports went mainly to the Persian Gulf, and Red Sea ports but they are now being supplanted by direct exports from Calcutta and Rangoon. The rice question is not of great importance to Sind and, as I have already stated, the position is that we are more or less self-supporting with regard to this crop.

Chairman.—What is the area which will be brought under rice when the further expansion of the scheme takes place ?

Mr. W. J. Jenkins.—In the present year, there are about five lakh acres under rice on the Lloyd Barrage Canals and with the final development of the Barrage areas, it is estimated that there will be just about six lakh acres under rice. This is out of a total area of rice in Sind of about one million acres.

Mr. D. L. Drake Brockman.—All the information we have goes to show that our needs are in excess of our production by something like 400,000 tons per annum. We import roughly that quantity, mainly from Burma.

Mr. A. McKerral.—Burma is the only province that has got over-production of paddy and rice. She produces about seven to eight million tons of which about a half is used by internal consumption and about a half is exported. Of the amount exported, about one million or a slightly over one million tons are at the present moment going to India. As everybody knows, this trade has been in existence for many years, Burma acting as a granary for India in her years of drought and deficiency. The trade I think is very advantageous to India, as it is to Burma, and so far as I can see there is not much prospect of the amount of rice produced in Burma exceeding Indian requirements. The population of India during the last decennium, increased by slightly over 33 millions whereas the acreage under food-grains for the whole of British India fell from 205 millions in 1921-22 to 203 millions in 1930-31.

If the acreage of cultivation under foodstuffs had gone up in proportion to the population it would have been 237 million acres, that is an increase of 22 million acres. Unless the decline in the acreage has been accompanied by an increase of production there is no reason to suppose that the present figures of cultivation would meet the demands of India, and India must take rice from Burma for an indefinite period. The only question which we might perhaps consider is whether in Burma itself there is a tendency of putting too much land under rice. So far as I know the Government has no big project of irrigation and of course the other accretions which come from jungle and disafforested areas are almost impossible to estimate. During the last decennium, one million acres were added to the acreage of rice in Burma. I should not have believed it if I had been told then and I very much doubt if at the end of another 10 years another million acres will have been added to the rice area in Burma.

Chairman—May I ask whether Burma finds the present price of rice satisfactory ?

Mr A McKerral—No, Sir We do not find the present price satisfactory The price has fallen during the last few years by 60 per cent, which has seriously affected both the landlord and the Government

Chairman—We would like to know what Burma considers as the extreme limit of fall of price, at which stage Burma would consider it necessary to take up the question of substitution which really means how much is the next possible crop less paying as compared with rice

Mr A McKerral—Our difficulty in Burma is that the great bulk of rice is grown in lower Burma under rain fed conditions, that is to say under rainfall which usually exceeds 100 inches and may come up to 250 inches So far as I know there is no other crop that can be grown on those areas except rice, except along the banks of streams where you may get small areas which would grow sugarcane and possibly jute and maize But we cannot consider the crops possible in these areas as a serious commercial substitute for rice On our canal areas of course we can do more Some of them are suitable for sugarcane and I gave the figure to the Advisory Committee of 100 000 acres as the maximum which we can reach if we substitute sugarcane for rice We have one sugar factory in operation another is being built and a third is under contemplation As for other crops I am afraid I cannot think of any because the price of most of these crops has fallen in almost the same ratio as the price of rice

Chairman—What is the difference in the cost of production of Burma rice as compared with that of Bengal rice ?

Mr A McKerral—I cannot say on the spur of the moment

Mr M Vaidyanathan—We had some information from the Burma Government The cultivation costs about Rs 20 per acre of irrigated rice in Burma and in Madras it ranges between Rs 35 and Rs 90

Chairman—So Burma has natural advantages which render the production of rice much cheaper than elsewhere.

Mr A McKerral—The point is that the population of Burma being too small to consume the total production a surplus of slightly over 3 million tons is available for export This the Burma producer must sell at the best price he can get The cost of cultivation in Burma must be higher than in the rain fed areas of India because the wages of labour are higher in Burma They are nearly double what they are in Bengal

Chairman—Are you quite sure that this idea of substituting sugarcane for rice is in the interest of the crop planning or is it the desire for being self sufficient ?

Mr A McKerral—It is mainly in the interest of the cultivators that sugarcane is grown If the cultivator can get Rs 10 to Rs 12 per ton of sugarcane, he makes about Rs 100 per acre whereas if he grows rice he will get according to the Burma measure 30 baskets for which he will get only Rs 15

and half on the old inundation canals in Upper and Lower Sind. The development of the area under the Lloyd Barrage will not make any appreciable difference to the acreage under rice in Sind. The total increase of rice area with the full development of the Barrage lands will not be much more than a lakh acres. Small amounts of rice are exported from Sind. These exports went mainly to the Persian Gulf, and Red Sea ports but they are now being supplanted by direct exports from Calcutta and Rangoon. The rice question is not of great importance to Sind and, as I have already stated, the position is that we are more or less self-supporting with regard to this crop.

Chairman.—What is the area which will be brought under rice when the further expansion of the scheme takes place ?

Mr. W. J. Jenkins.—In the present year, there are about five lakh acres under rice on the Lloyd Barrage Canals and with the final development of the Barrage areas, it is estimated that there will be just about six lakh acres under rice. This is out of a total area of rice in Sind of about one million acres.

Mr. D. L. Drake Brockman.—All the information we have goes to show that our needs are in excess of our production by something like 400,000 tons per annum. We import roughly that quantity, mainly from Burma.

Mr. A. McKerral.—Burma is the only province that has got over-production of paddy and rice. She produces about seven to eight million tons of which about a half is used by internal consumption and about a half is exported. Of the amount exported, about one million or a slightly over one million tons are at the present moment going to India. As everybody knows, this trade has been in existence for many years, Burma acting as a granary for India in her years of drought and deficiency. The trade I think is very advantageous to India, as it is to Burma, and so far as I can see there is not much prospect of the amount of rice produced in Burma exceeding Indian requirements. The population of India during the last decennium, increased by slightly over 33 millions whereas the acreage under food-grains for the whole of British India fell from 205 millions in 1921-22 to 203 millions in 1930-31.

If the acreage of cultivation under foodstuffs had gone up in proportion to the population it would have been 237 million acres, that is an increase of 22 million acres. Unless the decline in the acreage has been accompanied by an increase of production there is no reason to suppose that the present figures of cultivation would meet the demands of India, and India must take rice from Burma for an indefinite period. The only question which we might perhaps consider is whether in Burma itself there is a tendency of putting too much land under rice. So far as I know the Government has no big project of irrigation and of course the other accretions which come from jungle and disafforested areas are almost impossible to estimate. During the last decennium, one million acres were added to the acreage of rice in Burma. I should not have believed it if I had been told then and I very much doubt if at the end of another 10 years another million acres will have been added to the rice area in Burma.

Chairman—May I ask whether Burma finds the present price of rice satisfactory?

Mr A McKerral—No, Sir We do not find the present price satisfactory. The price has fallen during the last few years by 60 per cent which has seriously affected both the landlord and the Government

Chairman—We would like to know what Burma considers as the extreme limit of fall of price, at which stage Burma would consider it necessary to take up the question of substitution which really means how much is the next possible crop less paying as compared with rice

Mr A McKerral—Our difficulty in Burma is that the great bulk of rice is grown in lower Burma under rain fed conditions, that is to say under rainfall which usually exceeds 100 inches and may come up to 250 inches So far as I know there is no other crop that can be grown on those areas except rice, except along the banks of streams where you may get small areas which would grow sugarcane and possibly jute and maize But we cannot consider the crops possible in these areas as a serious commercial substitute for rice On our canal areas of course we can do more Some of them are suitable for sugarcane and I gave the figure to the Advisory Committee of 100 000 acres as the maximum which we can reach if we substitute sugarcane for rice We have one sugar factory in operation another is being built and a third is under contemplation As for other crops I am afraid I cannot think of any because the price of most of these crops has fallen in almost the same ratio as the price of rice

Chairman—What is the difference in the cost of production of Burma rice as compared with that of Bengal rice?

Mr A McKerral—I cannot say on the spur of the moment

Mr M Vaidyanathan—We had some information from the Burma Government The cultivation costs about Rs 20 per acre of irrigated rice in Burma and in Madras it ranges between Rs 35 and Rs 90

Chairman—So Burma has natural advantages which render the production of rice much cheaper than elsewhere.

Mr A McKerral—The point is that the population of Burma being too small to consume the total production a surplus of slightly over 3 million tons is available for export Thus the Burma producer must sell at the best price he can get The cost of cultivation in Burma must be higher than in the rain fed areas of India because the wages of labour are higher in Burma They are nearly double what they are in Bengal

Chairman—Are you quite sure that this idea of substituting sugarcane for rice is in the interest of the crop planning or is it the desire for being self sufficient?

Mr A McKerral—It is mainly in the interest of the cultivators that sugarcane is grown If the cultivator can get Rs 10 to Rs 12 per ton of sugarcane he makes about Rs 100 per acre whereas if he grows rice he will get according to the Burma measure 30 baskets for which he will get only Rs 15

Chairman.—Is sugarcane more profitable than rice ?

Mr. A. McKerral.—Yes.

Chairman.—Will it not then replace certain amount of sugar which Bihar and Orissa is producing when these three factories are set in full working order ?

Mr. A. McKerral.—Certainly. At present we import from Java. About five years ago we were importing 40,000 tons but now it has fallen considerably.

Mr. D. R. Sethi.—We have on an average about 13 million acres under rice. We produce just a little less than five million tons of clean rice every year and inspite of this we are a deficit province and have to import about 80,000 tons from Bengal, so that in Bihar and Orissa there is no over-production of rice.

Mr. C. R. Pawsey.—As far as Assam is concerned there is no over-production and this is chiefly because of the large tea garden population all of whom are rice eaters. In Upper Assam there is always a deficiency and in parts adjoining Bengal there are occasional floods when we have to import rice from outside. In addition our land revenue assessment is based on the rice producing capacity of the land and during the currency of the settlement I do not think it would be possible to insist on any limitation of the area to be sown.

Mr. J. H. Ritchie.—In the Central Provinces the area under cultivation is roughly 5½ million acres and except in very good years that is just sufficient to feed the population ; while in years of good crops there is a certain amount of export to contiguous parts of the country. We have a steady market in Central India, in United Provinces, in certain parts of Bihar and Orissa and in the Nizam's Dominions. From the statistics I can say that Central Provinces is just self-supporting.

The Hon'ble Sir Frank Noyce.—Perhaps it would facilitate our work if the Imperial Council of Agricultural Research could give us some figures of the relative fall in the value of the agricultural products with which we are dealing now.

Mr. M. Vaidyanathan.—I have given the statistics in the book entitled " Statistics and graphs " at page 10. I have tabulated the principal crops, and compared their present prices with the average for three years ending 1929-30. From the table it will be found that tobacco seems to be most fortunate and most of the food-grains have fallen in price between 40 and 60 per cent. This table gives the relative fall in prices of the several agricultural products.

The Hon'ble Sir Frank Noyce.—It seems to be clear that rice has fallen almost more than anything else.

Mr. M. Vaidyanathan.—It seems to be so.

Dr D B Meek—1873 Index No , that is the base

Average of ten years ending 1929	In February 1931
Rice 133	62 2
Jute, 112	41 5
Raw cotton, 138	67
Wheat, 169	81
Oilseed, linseed, 157	79
Rapeseed, 134	67
Sesame, 143	55
Poppy, 134	77
Gram, 175	85
Sugar, 283	134
Tea, 162	164

Col A. Olver.—Have you got the figures for butter ?

Dr. D B Meek—Butter does not come into the index as far as I remember, but we could get the price of imported butter for those ten years I could get you the price of ghee

Chairman—I think we had better stick to rice for the present Now, at page 7 of the Note the Committee arrived at the conclusion that there was no over production of rice either in India as a whole or in any part of it That is now open to discussion

Rao Bahadur C Tadulinga Mudaliar—May I suggest, Sir, that as there is no definite data with regard to the quantity of rice consumed by the people a census of the rice eating population of the various provinces be arranged to be taken so that we may have definite figures on the subject for future guidance

Chairman—There is going to be a Provincial Committee, and that will come under provincial marketting, and it will be included in that

Rao Bahadur C Tadulinga Mudaliar—Then that will be all right

Chairman—Now, is the conference prepared to endorse this conclusion ?

Rao Bahadur Narasimha Raju—Just now it was stated that Burma over produces rice, but *now it is recorded here that*—' *it was agreed by* the said Committee that there was no over production of rice either in India as a whole or in any part of it ' I doubt the accuracy of the last portion When Burma admits that there is over production as far as that province is concerned, I don't think the fact has been correctly stated in the statement by adding the words at the end ' or any part of it ' From the statement supplied to us it is clear that Burma produces over 7 million tons of rice It was said just now that she consumes half of it In some other place it was stated there is an exportable surplus of 3½ or 3¼ million tons of rice in Burma Therefore, if you are to judge the production of provinces by their consumption, and when there is a surplus in a province, it will be better to call that province an over producing province If we proceed like that, we will be in a better

position to judge the situation. Now, when there is over-production in Burma to the extent of 3½ million tons, and the quantity which the rest of India imports from Burma is only one million tons, there is yet a surplus of 2¼ or 2½ million tons of rice in Burma. The question then arises whether this surplus will be absorbed in the Empire or outside the Empire. If it can be absorbed within the Empire, then from the figures supplied to us by the Statistical Department we find that the quantity of rice consumed by Ceylon, British Malaya and other parts of the Empire comes to 2 million tons or something like that. Therefore, as far as Burma is concerned, even making a liberal allowance for import of Burma rice into the British Empire, there will still be a surplus, and in Burma's neighbourhood we have got the Indo-China and Malay States which are producing large quantities of surplus rice. According to the figures supplied to us, it is stated that the surplus in Siam is in the neighbourhood of 3,864 million pounds; which when converted into tons, comes to about 1 million 7 hundred thousands tons. In Indo-China the surplus is 2,760 million pounds, and this when converted into tons comes to about one million one hundred thousands tons. Therefore, there is a surplus of nearly three million tons of rice in Siam and Indo-China. The question that has now to be tackled is, what is to become of this surplus rice in Indo-China, Siam and Burma,—and the total surplus comes to nearly 6 million tons. Even according to the figures furnished, the total quantity of rice that was imported into other countries in the year 1930 or 1931 is 2,195 thousand tons. Therefore, if we take all the figures together we find there is yet a surplus of 4 million tons or more in the rice exporting countries of Burma, Indo-China and Siam. The matter needs very careful consideration by this conference as to how to dispose of the extra two million and odd tons of rice from Burma. It will not be wise, I think, to record that Burma has no surplus of rice production.

Chairman.—I don't suppose it was intended that over-production means production in excess of local consumption. I suppose over-production meant that at the end of the year there was something left over.

Mr. A. McKerral.—When I spoke of over-production in Burma, I used the word in the sense in which the representatives of other provinces of India have used it, namely they have no excess after the wants of their people have been met. Over-production in Burma does not mean that she is left with a large stock on her hands.

Chairman.—But is the world producing too much rice or more rice than is needed?

Mr. B. C. Burt.—From the figures supplied by the International Institute, we consider that from 1933 onwards the world is over-producing rice; that is to say, the rice production of the big rice consuming and rice importing countries like Malaya, Ceylon, China, is increasing. Every number of the International Statistical Bulletin for the last 3 months has referred to the contraction of the Far Eastern Market, which means that Burma, Siam and French Indo-China, the three great rice exporting countries of the world, are finding it increasingly difficult to market their surplus. The last number of the Bulletin refers to the fact that Burma is in a better position than Indo-China and Siam, because they have been able to send much more rice to India because of the smaller Indian crop, that Siam also has sent more than hitherto and that French Indo-China is in the worst

position There is a definite indication that since the harvest of 1935 the world position has definitely deteriorated

Mr C G Wodehouse—So far as the surplus in the main producing countries like Indo China Burma and Siam is concerned I think I am correct in saying there has never been a large carry over until the new crop The figures according to my information would not exceed half a million tons at the end of any one year which is a very trifling quantity compared to the amounts actually at the disposal of those three countries The suggestion that there is over production of rice seems to have arisen from the fact that there has been some decline in the overseas trade of rice from India Admittedly there has been some decline The reasons for that can be briefly stated in two main heads In the first place as we shall come to later in our agenda there have been various restrictive measures taken by foreign countries some of which are detailed in the note circulated, and there are others which might be mentioned That to some extent accounts for the decline in the exportable quantities marketed in foreign countries There is again the other main head and that is there appears to be very definite evidence that the quantities of rice required by India proper are tending to increase This may be caused I think possibly very largely caused by increase in population There may have been seasonal factors such as shortages of crops in some areas and possibly the low price may have accentuated the consumption But my point is that as regards the Burma surplus that we are now discussing the amount that is available for the overseas market is limited by the extent of the amount that other provinces in India require to draw on the reserves that are available in Burma The exports I call them exports the amounts taken by provinces in India from Burma are showing a tendency to increase The available figure of the surplus in Burma is estimated this year to amount to 3 200 000 tons It may be of interest to give the figures of actual exports up to the end of May this year Of that available surplus 850 000 tons has already been marketed overseas to foreign countries India has taken 1 100 000 tons already up to date So that out of that 3 200 000 tons 1 950 000 tons has already been disposed of which leaves 1 250 000 tons available for disposal between now and the arrival of the new crop at the end of December I suggest that those figures prove quite conclusively that there is every possible chance that there may be even a shortage if India is going to continue to require such large quantities and it would appear to be highly inadvisable both in the interests of Burma and in the interests of India herself that the available supplies of Burma should be in any way restricted or decreased

Mr H M Hood—May I ask whether Mr Burt has any information of the stocks of rice held in the various countries

Mr B C Burt—No Sir There are no figures of stocks of rice as far as I know except stocks in warehouses at ports That is the great difficulty in calculating what the exportable surpluses are Mr Wodehouse can perhaps tell us what the Rangoon stocks are but I think he will support me when I say that there is no information about up country stocks I know that the International Institute has said that there is practically no information about up country stock in Indo China or Siam and of course there are practically no statistics at all for China

Mr. C. G. Wodehouse.—We are in a position to estimate very closely stocks carried forward at the end of any one year, if that is the point you are referring to.

Mr. H. M. Hood.—The point is that if there is over-production that the world stocks ought to increase.

Mr. B. C. Burt.—Those, Sir, will be largely invisible stocks in the hands of the cultivator, of which we get no figures.

Chairman.—So far as the point under consideration is concerned, that is simply that objection was taken to the statement of the sub-committee that there is no over-production of rice in any part of India. This is a drafting matter and would Secretary kindly note that the phraseology of this conclusion is to be modified to indicate that over-production does not mean excess over local consumption but means that there is no stock left in the province of origin, the whole being disposed of. What we have been discussing in part is really the proposition decided by the committee by a majority which reads as follows :—

> "That in view of the present world conditions in the matter of rice production, no Provincial Government should ordinarily offer any stimulus to an increase in the present area under rice."

That is really the proposition ; now, which province would like to father this proposal ?

The Hon'ble Sir Frank Noyce.—I notice that five provinces object to this proposition. I should like to know, since they disagree, what stimulus they have been offering or propose to offer ?

Chairman.—Let us first hear from those provinces which would like actively to promote this proposition.

Mr. H. M. Hood.—As far as Madras is concerned, Sir, provided that a fairly liberal interpretation is put on the word "ordinarily", we would not oppose this resolution.

Chairman.—I am at present on the look out for some one who would father it, not for such half-hearted support.

Mr. H. M. Hood.—I understand that the original position was that the resolution was moved by Dr. Burns but the word "ordinarily" was put in on Mr. Raghaviah's instance. Perhaps Dr. Burns will support it.

Dr. W. Burns.—I would like actively to support this proposition, because there is no thought of restriction. It is not a question of reduction : it is only a matter of sounding a note of caution and saying 'do not go ahead too fast'. The position has been very clearly explained. We cannot take into consideration the position without considering the world situation, and it is the world situation which controls the price of rice. Mr. Burt read to the Crop Planning Committee, the advisory sub-committee, a passage out of the International Review of Agriculture which is so pertinent that I take the liberty of reading it, it is quite short :—

> "Demand in the Far East remained rather slow in February. The apparently good production in China, the prospects of a good crop in British Malaya and in the Netherlands East

Indies and the large crops in the Japanese territories make the market prospects in this direction very poor

"In the three major exporting countries together there has been a slight increase in production in 1933 34 Their joint export surplus, taking into account old crop carry over, is also somewhat above that of the previous season While the market position in Far Eastern countries appears to have deteriorated, the small crop in India has greatly alleviated the situation of the exporting countries While the exports from Rangoon to foreign destinations up to 24th February diminished from 424 million pounds last year to 276 million this year, those from Rangoon to India upto the same date, with the addition of the exports from smaller ports upto 17th February, rose from 410 million to 550 million pounds Total exports from Siam upto the end of January were 18 per cent larger than in the same month last year, due also to much larger takings by India The position of Burma, thanks to the large Indian deficiency is thus relatively satisfactory, that of Siam, though so far also greatly assisted by the strong demand from India, and that of French Indo China, with its increased production, less assured, much depending on the size of the as yet rather undefined crop in China"

The point is that there is a very definite danger of a surplus and we cannot in view of that definitely encourage extension of rice production in India or in Burma Therefore I most heartily support the motion, for which I voted in the sub-committee, and would commend it to this full Conference

Rai Bahadur B B Mukharji—The fact that this resolution took such a long time to find a sponsor goes to show that the persons who put it forward were not quite convinced of its necessity The last speaker has just told us about the international position, but I would make it clear that we are nationalists first and internationalists later I want to support the proposition that it ought to be the look-out of India first and the provinces later that they must be self contained When this proposition seeks to put a restriction simply because the world production is greater, I from Bengal have got to see how far it affects me If I find that my people, who are worthily or notoriously rice eaters, have not got the rice that we can produce, when we see that we can produce the finest rice in the world and when we can see that the province is supplied with all the gifts of Providence necessary for such production, I do not see why we should be put into this uncomfortable position of eating—though I am very thankful to Burma—Burma rice which we consider to be inferior, and why should restriction be put on us to produce rice for our own consumption, rice which we consider to be best suited to us and which we can produce? I can understand that if the world position deleteriously affects the price, we should be cautious At the same time I cannot quite see why I should be left in Bengal in this uncertain position and why I should not take steps to support my own people with a produce for which the province is suited. I submit as a corrective to this resolution that, subject to a province being satisfied that its production can satisfy its own people, it ought not to go beyond That is, I must first see that my people do get the rice of the

country and then I would have an eye on the total output of the world. If we are perpetually restrained from producing that which is necessary for our own consumption, I am afraid it will be a very unhealthy and undesirable position into which we will be put.

Chairman.—You would be satisfied if the Burma variety of rice improved ?

Rai Bahadur B. B. Mukharji.—Quite true. My position is this I do not really see why Bengal should not be self-contained. I am not speaking anything against all India ; but I do think that it is a sound economic proposition—a proposition which has been demonstrated to be sound by the late war—that a country should be self-contained in the matter of essential foodstuff. I do not want to declare war against any other province. I do think that in my self-interest the production of my essential food crop should not be so restrained that in time of distress or in time of want I should have to look to somewhere else or let my people go with empty stomachs, specially when I have been favourably endowed by providence with suitable land, with suitable capacity, with suitable varieties—probably you are aware, Sir, that one of the experts had stated that we evolved about 400 types of paddy.

Chairman.—Apparently during the last few years the cost of production in Burma is lower than in Bengal.

Rai Bahadur B. B. Mukharji.—But, Sir, it is inferior stuff. With all respect for Burma I submit it is inferior stuff. If you ask a Bengalee to have a guest and then give him Burma rice, he will never return to the house any more.

The Hon'ble Sir Frank Noyce.—May I interrupt Mr. Mukharji ? I should like to ask him how he expects Burma to take Bengal jute to the value of Rs. 1,17 lakhs per annum unless they export some rice to pay for the jute. Would it be entirely to the advantage of the Bengal cultivator if Burma ceased to import Bengal jute ?

Rai Bahadur B. B. Mukharji.—I would in fairness to Burma say that if they can have a substitute for the thing we produce they are perfectly welcome to use it. We produce a thing which they cannot produce. Not out of charity but out of good-will we tell them " Take this, it will serve your purpose ". I do submit that Burma rice does not stand in the same footing. Burma rice if it is to continue to feed us will only mean that we are restrained from producing excellent rice—if I may say without impertinence to Burma—in order to consume the coarse rice of Burma. We produce jute. Our cultivators go down in waist deep of water to produce a thing which they need. If you do not want it I do not want to force it on you. The position between our jute and their rice, with great respect, is very different. I would be quite willing to agree to such a proposition provided we are free to take any steps to be reasonably self-contained. We would then be perfectly willing to accept it.

Mr. A. McKerral.—In the note which I submitted to the Advisory Committee I tried to indicate the physical conditions which existed in Burma and in Bengal in order to show that some provinces can produce crops which other provinces cannot produce. We might say the same thing about Bengal jute as is generally said about Burma paddy. We might ask why we should not grow our own jute and so be self-

contained The truth is we cannot grow jute, because we have not Bengal's climate and Bengal's soil Therefore we exchange our paddy for Bengal's jute to the tune of about Rs 2 crores and to me that seems a very fair arrangement We must not forget that in addition to the financial and economic factors involved there are physical factors beyond which we cannot get

Mr P B Richards—Before speaking from the point of view of the rice situation in the United Provinces, I wish to draw your attention to the fact that in the Vice Chairman's note on the proceedings of the Sub Committee the representative for Burma has not been included among the minority who voted against the resolution that no Provincial Government should ordinarily offer any stimulus to an increase in the present area under rice Burma, Bengal the United Provinces, Sind and the Central Provinces voted against this resolution Now, Sir, these are the main rice producing areas They cover, I imagine something like 90 per cent of the total rice raised throughout the Indian Empire, if Burma is included

Sir T Vijayaraghavacharya—It is a clerical error

Mr P B Richards—Then, Sir, if the Provinces which are really interested in the growing of rice do not desire these restrictions why should the Provinces which are not greatly interested in rice growing wish to enforce them So far as the United Provinces are concerned the reason why this resolution should not be passed is two fold One is that our average acreage in the United Provinces for the last 10 years has been approximately 7 million acres This year it was just under 6 millions If we are not to encourage our cultivators to go back to their normal 7 million acres under rice, what are we to do ? We should have to grow on one million acres some other food crop, if we could find one which pays us as well, and there seems to be no practical advantage in attempting to change one food crop for another even, if it were practicable to do so on rice land The other reason, Sir, why this resolution as it stands is undesirable is that it precludes the utilisation of new canal schemes which have been designed, in part at any rate, for the turnover from less paying crops to rice among others The capital has been sunk, the canals are functioning and development is going forward For the change over from unirrigated to irrigated conditions, the cultivators must be trained in the proper use of water and in the change of rotation which is necessary Consequently very active encouragement is required if these canals are to perform the function for which the Government have constructed them If, therefore, at this stage it is laid down as a general principle which Government might feel itself in duty bound to follow, that no stimulus should be given to an increase in the rice area then all its calculations in regard to its schemes—not new proposals but schemes already in running order—would have to be revised This would seem to inflict considerable hardship upon just such Provinces as happen to be caught at this critical moment

The Hon'ble Sir Frank Noyce—In dealing with a Resolution of this kind, we should clearly define the terms What is meant by stimulus Does stimulus mean propaganda ? We cannot imagine anybody here in the present world conditions advocating special propaganda

Dr. W Burns—Stimulus does mean propaganda It also means such a policy as putting new canal under rice It also means putting disafforested areas under rice Those three points were in our minds

Diwan Bahadur T. Raghaviah.—With reference to Mr. Richards' remarks, this point was prominently before us and that is why I raised it and that is why the word " ordinarily " was used. In Madras costly irrigation schemes have come into existence and they have not reached their ultimate capacity. It was not our intention that anything should be done to prevent that ultimate capacity being reached in those cases. The idea in our minds was that no fresh large project for putting land under rice should be undertaken.

Rao Bahadur C. Tadulinga Mudaliar.—With due deference to the Sub-Committee who passed this resolution I strongly oppose it. Rice is the only crop which gives the highest revenue to Government at present. There are several schemes in Madras such as the Cauvery-Mettur, the Bhavani and the Tungabhadra. I am sure there will be a large acreage brought under cultivation. Out of 45 millions of the population, 50 per cent. are rice-eating population. And Madras is able to supply the rice requirements to only 16 to 18 million people. Madras is not producing enough quantity of rice for her own purposes. Therefore we should not be in a position to support this Resolution because Madras should after some time at least when her conditions improve be in a position to be self-supporting.

Chairman.—That you had better decide among yourselves. Different members representing Madras cannot express different views.

This has been a very interesting discussion bringing out very very pointedly the difficulties of crop planning in India. We have here more or less a number of autonomous provinces, each province feeling that it owes a duty to itself first and to India afterwards. That is the position taken up by Bengal. (*Rai Bahadur B. B. Mukharji* : Yes.) The position is not unreasonable. At the same time when we are expected to arrange crop planning for India, it must be realised that in securing the best possible result for India as a whole it will be extremely difficult in some cases not to so adjust things that thereby the interests of the province are not kept in view to the extent that they would be if Indian interests were not to be supreme. Is this crop planning with reference to each province or is it to be with reference to the whole of India ? It is very natural for all rice producing provinces to feel that as long as their own demands are not met there should be no restrictions placed in the way of their going on producing rice ; there should be no restriction placed on their producing such rice as they need. That is perfectly reasonable. At the same time we have to take into consideration the object which we have come here for. It is to reconcile the interests of provinces as far as possible, to see that India gets, as I said, the best value out of its produce. I do not know what the solution of this difficulty is and I should not be surprised if we do not achieve greater success than the World Economic Conference which met in London last year. Still there are lessons to be learnt. We will know the limitations on the power and authority of Government and also the readiness to sacrifice our own interests or provincial interests for the interests of the country as a whole. Now in face of the opposition from rice producing provinces to this proposal, is it possible for us to agree to a formula like the one which was enunciated by Bengal and a representative from Madras to the effect that rice producing provinces which are deficit provinces in the sense that their local demands are not

met by their production should be free to produce more till their demands are met? Has Burma any objection to that formula?

Mr A McKerral—I can see no great danger to Burma from the adoption of such a formula because it is unlikely, as appears from the figures which I gave, that the Indian provinces will be able to support themselves for a very long time to come

Dr W Burns—I submit that the formula just now proposed is not a very great help because it seems to be a concession to the narrow provincial point of view which we must combat It has been suggested by the representative of the United Provinces that the rice producing provinces voted against this while provinces which were not so interested in rice voted for it Although the area in Bombay is a third of that in the United Provinces and a fourth of that in Madras, it does not follow that Bombay is not interested In the last Legislative Council the member for Thana asked a question as to what was going to be done about the drop in the price of rice due he said, to Burmese and other competition That shows that the question is vital there still I am not authorised to commit my Government in any way to any policy without examining it I am judging this simply as a responsible representative and as a member of the Agricultural Department and as one who is in touch with provincial, Indian and international matters It seems to me that the Resolution is so innocuous that I cannot see any objection to passing it in its present form.

Mr H M Hood—The present policy of the Madras Government since the slump in prices is caution in instituting irrigation schemes designed or likely to increase the rice producing area of the Presidency and examination of schemes designed to irrigate other crops The Resolution as it stands goes much beyond that and compels the rice producing Governments not to increase the produce of rice at all If the present area is not to be increased at all, then the Madras delegation could not agree to this Resolution at all We could agree to such a formula as "provided that it should not go beyond the power of consumption in the province" That is, I think, the intention of your suggestion

Dewan Bahadur T Raghaviah—As one who was responsible partly for the Resolution I may say that we looked to the interests of India as a whole In regard to Madras we were aware that Madras has spent a good deal of money on irrigation schemes for the production of rice and that is why we said "ordinarily" to save cases in which it was necessary to go on expanding cultivation The idea was that no new large area should be brought under rice cultivation even in Madras There may be special cases where on account of special factors it may be necessary to introduce rice into small new areas Except in those cases the idea was that the cultivation of rice on new areas should not be encouraged and I do not really see that there can be any objection to accepting the proposition in that sense

Chairman—Will the proposal be acceptable to the Conference in this revised form?

"That the present world conditions in the matter of rice production be borne in mind by provincial Governments which may be contemplating an increase in the present area under rice"

Mr B S Kamat—Even with regard to this revised formula what about the commitments which the Local Governments have already

made in irrigation projects? As my friend Mr. Jenkins pointed out, I think the Sind canal system contemplates that although the present area under rice may be 5 lakhs, in 1941 it is expected to rise to 6 lakhs. The whole scheme has been based on that commitment and I don't know how the Local Governments will bear the world conditions in mind if they are to be true to their commitments. We are agreed about the general principle that there should be no over-production within India in any province and in framing a formula we may say that there is no case in the opinion of this Conference for restriction of the present area. If we confine ourselves to that statement I think we go so far as we ought to go. We are now in the hands of Local Governments and we cannot advise them as to what they should do in future in respect of their commitments.

Rai Bahadur B. B. Mukharji.—As regards Bengal we have already accepted your suggestion and we do not think it will hamper us in any way. But I emphatically deny that I have been provincial at the cost of India. I have been provincial in the interests of India. The reason why I object is this that the proposition that was being called narrow provincialism was really one which meant a broad-hearted nationalism for India. I accept this proposition whole-heartedly.

Chairman.—Has Dr. Burns anything to say?

Dr. W. Burns.—I am afraid I have said all that I have to say at the moment. We are asked to refrain from positive action in propaganda or in putting new areas under rice. I do not see myself that this resolution as worded in the cyclostyled paper before you in any way interferes with present commitments, and I must say that this is the best thing that we can do. It is very mild; it does not restrict the area; it is an advice that there should be no definite pushing of future rice cultivation; and therefore, with all deference to you, I would be inclined to stick to the proposal as it has been drafted by the Sub-Committee.

Chairman.—That is on behalf of Bombay?

Dr. W. Burns.—Yes.

Mr. A. D. Gorwala.—Bombay excluding Sind. We do not agree with the view that Dr. Burns has taken.

Chairman.—Will those who support Bombay *minus* Sind indicate by show of hands? There are two alternatives. We may pass a resolution or pass nothing. If the Conference prefers to pass nothing it is open to it to do so, or if it prefers to pass that mild form of resolution that was read out it is open to it to do so. Will those who support the formula read out indicate by provinces? (Madras, Bengal, the Punjab, Central Provinces, Sind, Bihar and Orissa and United Provinces indicated assent; also Bombay in default of something more positive.)

Chairman.—Now we proceed to page 8 of the Note, that in view of the answer under (1) above no restriction is recommended and the questions under (2)A do not arise. Then we come to internal markets. As regards internal markets it was agreed that the development of internal markets was of great importance and that this development could best be pursued by means of the marketing scheme now under the separate consideration of the Imperial Council of Agricultural Research. As regards external markets the Sub-Committee made the following recommendations: (*i*) that negotiations should be opened with Ceylon and British

Malaya with a view to obtain preference for Indian rice. Let me take this item No. (*i*).

The Hon'ble Sir Joseph Bhore.—The only observation that I would like to make in regard to this is that this question of preference for our rice in Ceylon has more than once engaged our attention. We are up against a difficulty there because Ceylon is quite prepared to consider preference to Indian rice but what she wants is some very special treatment for Ceylon cocoanut produce so far as this country is concerned. We are thus in a dilemma. However, I can assure the Conference that we shall bear this recommendation, if it is carried by the Conference, very carefully in mind in our future negotiations with Ceylon.

This item was unanimously agreed to by the Conference.

Chairman.—We now come to item No. (*ii*)—that as soon as financial circumstances permit the export duty on rice should be removed. That is a sort of demand which is very easy to make but not easy to meet. But is that one of the proposals on which the Sub-Committee was agreed ?

Dr. W. Burns.—There was one dissentient. That was myself. It seems to me that this is a duty which has been on for a long time—I have been told for over 70 years. A similar duty is imposed by the other two exporting countries Siam and Indo-China also and it does not seem to me that it is necessary at the moment to do away with what is a source of revenue to the Central Government. If we do away with the duty the foreign competitors may do the same and we shall be in the same position as before only with loss of revenue to the Central Government and nothing gained.

The Hon'ble Sir James Grigg.—I think the question of removing the export duty on rice at the moment is rather an academic one because the best part of a crore is obtained from it, and personally I do not see the Government of India being in a position to surrender a crore of rupees of revenue in the very near future.

Rai Bahadur B. B. Mukharji.—But that does not stand in the way of suggesting to the Government of India that we do think that doing away with the export duty would expand our market and help to create good will in the interests of India and that it should be adopted at the earliest possible moment.

The Hon'ble Sir Miles Irving.—The Punjab Government does not want to commit itself.

Mr. H. M. Hood.—The Madras Government are very anxious that the duty should be removed. During the course of the Economic Conference held a couple of months ago I think Sir George Schuster raised the point-not that they could not afford to take the duty off and that they were badly in need of revenue, but that it was a very long standing tax. That was the point made then.

Chairman.—Dr. Burns' point was that it is a duty from which Indian exporters suffer along with exporters of other countries, and our leading the way to its removal may well be followed by others.

Mr. H. M. Hood.—If other countries have an export duty on rice and put obstacles in the way of their people exporting rice, that does not seem to be any reason why India should also have an export duty on rice.

Chairman.—The obstacles will just be the same as they are at present if they follow us in this good lead.

Mr. H. M. Hood.—That is true, but I think Sir George Schuster said that the position with regard to rice was precisely the same as that with regard to wheat, and there does not seem to be any export duty on wheat. Madras is anxious that this export duty should be removed.

Chairman.—There seems to be some difference of opinion as to the advisability of this particular proposal. If it is academic is it worth while proceeding to divide on it ? If it is a matter of principle with some, expression of opinion of each Government ought to be enough.

Madras, Bengal, Central Provinces, Burma, were for removal. Bombay was not for removal. Punjab and United Provinces did not wish to make any recommendation. Sind had no instructions in the matter and did not propose to say anything. Assam had nothing to say on the subject. Bihar and Orissa was not interested in the subject.

Item No. (*iii*) of the Note : that the specific duty imposed by the Ottawa Agreement on imports of rice from foreign countries to the United Kingdom should be extended on paddy to the extent of three farthings per lb. Government will do their best to have this point carefully examined and see what can be done.

Item No. (*iv*), Part I of the Note : that Burma and Bengal which produced rices suitable for English and Continental markets should continue their experiments in the matter of improving the quality of such rices. We had a reference some time ago as to what can be done to improve Indian rice to enable it to compete with Italian and Spanish rice. The inquiry was circulated to all provinces and Bengal and Burma were the only two which held out hopes of doing something in that line. If the situation has changed since then and any other province hopes to enter the field of competition I should like to know. (No discussion) I trust these two will do their best to see whether any portion of the European market can be secured for Indian rice of superior quality.

Rai Bahadur B. B. Mukharji.—We undertake to do our best.

Chairman.—I understand from the Vice-Chairman of the Agricultural Research Council that a handsome grant has been given to Bengal for this purpose.

Rao Bahadur Narasimha Raju.—I see that Madras is omitted from this list.

Sir T. Vijayaraghavacharya.—Madras is not interested in this matter.

Rao Bahadur D. Ananda Rao.—I asked for information as to the variety required and the quantity required. I understand that the quantity required is a little over a million tons.

Chairman.—I dare say the Council of Agricultural Research will be very glad to get any further information that may be required.

Railway freights. I understand that the Railway Board are anxious that they should accommodate the needs of those who want revision of freights on agricultural commodities. They are anxious to consult agricultural officers in this connection. I suppose the Conference notes this with satisfaction.

Paragraph 3 of Part I of the Note. It would not be wise to impose any restrictions on the import of foreign rice into India. Later on

the conclusion arrived at is that an import duty at the rate of Re. 1-4-0 per maund and of 15 annas a maund on paddy might be imposed on foreign countries.

Sir T. Vijayaraghavacharya.—We want a moderate amount of duty that will not produce retaliation.

Dr. W. Burns.—I find it exceedingly difficult to express any opinion on this subject. I have not consulted my Government and I am expressing here my own opinion. We are trying to raise prices at the present moment and I do not see any reason why we should not adopt the same procedure as in the case of wheat.

Mr. C. G. Wodehouse.—I would suggest that instead of the word ' foreign ' we might say ' non-Empire ' countries.

Chairman.—If this duty is to be like the wheat duty, then that is applied to wheat coming from any country other than India. It was really meant to fight Australian wheat.

Sir T. Vijayaraghavacharya.—Both mean the same thing. It is well understood.

Mr. A. D. Gorwalla.—May we have figures of the imports of rice from Siam.

Mr. M. Vaidyanathan.—The imports from Siam and Indo-China from January—March 1934 amounted to 58,000 tons as compared with 8,500 tons during corresponding period last year.

The Hon'ble Sir James Grigg.—Is there not some absurdity in imposing an export duty and an import duty on the same commodity ?

Sir T. Vijayaraghavacharya.—This reform has been long put off on the ground of logic. The thing is now being really felt by the Madras Government. We felt that practical considerations must prevail over logic.

Mr. C. G. Wodehouse.—I can give later figures than those quoted by my friend. The actual imports from Siam into India in the last six months, that is to say, from December to May amounted to 150 thousand tons.

Mr. M. Vaidyanathan.—There has been some discrepancy in the figures furnished by the Burma Chamber of Commerce and those supplied by the Director of Commercial Intelligence.

Chairman.—Apparently this is a very important matter indeed. It is an administrative matter mixed up with financial considerations but I am sure that in view of the opinion of the committee, Government will take this into very serious consideration. In fact the subject was agitated by a number of members in the Legislative Assembly and the Council of State and has been under examination already.

The Hon'ble Sir Joseph Bhore.—I would like to endorse what the Chairman said and we will certainly look into this matter very carefully but I would like to emphasize the danger of duties such as this leading to retaliation in regard to our agricultural produce. That is a very serious question indeed and the possibility of retaliation has always acted as a deterrent to our taking action. We have been accused of delaying action in this matter. We have delayed action for a very specific reason, because there is a danger of retaliation. A duty of 33 and one-third per cent.

is by no means a light one. It is sufficiently heavy to call for retaliatory action from countries which are affected. At the same time I think we can give an assurance, not that the matter will merely be looked into but that it is actually receiving consideration at the present moment and is under reference to the Governments which are concerned.

Chairman.—This brings us to paragraph 4 of Part I of the Note—the unanimous recommendation of the Sub-Committee that it was desirable to have a standing committee of the Imperial Council of Agricultural Research, that the functions of such a committee which should be constituted under the rules and regulations of the Council should be advisory, that its constitution should be on the lines of the other standing committees of the Council, that it should be financed from the funds of the Council, and so forth. Are there any observations by members of the Conference ? I take this is agreed to.

The next point is that Madras desire that the import of rice from Burma should be subjected to a quota but other members of the Committee did not agree with them. Does anybody wish to make any observations ?

Rao Bahadur C. Tadulinga Mudaliar.—Some years ago Burma was importing about 750,000 tons of rice into Madras but of late I understand that they are importing over a million tons. If that goes on for a number of years and if they are going to increase their imports to two and three millions, what is going to be the fate of the rice-growers of Madras ?

Chairman.—But you are increasing your population ?

Rao Bahadur C. Tadulinga Mudaliar.—But we are not increasing our population with such rapidity (Laughter). Therefore, we may, at least for the information of this Conference, suggest that Burma limit its imports into Madras to 750,000 tons and not beyond that.

Chairman.—Do you make that suggestion in the interests of the rice-gowers of Madras ?

Rao Bahadur C. Tadulinga Mudaliar.—It is only a suggestion—it is left to the Conference.

Chairman.—The Conference would like to know whether this suggestion is intended to be put into operation if Burma agrees to it, or in spite of Burma's not agreeing to it, and, if so, in what way you would advise the Conference or Government to act ?

Rao Bahadur C. Tadulinga Mudaliar.—The Director of Agriculture will be able to explain the position.

Chairman.—What have you to say with reference to your desire that Burma should be limited to 750,000 tons of rice being sent to Madras and no more ?

Rao Bahadur D. Ananda Rao.—I would not fix any limit like that. I would say " any reasonable amount ".

Chairman.—And the " reasonableness " being left to Burma ?

Mr. H. M. Hood.—The " reasonableness " will I think have to be fixed by some agreement with Burma. What I was instructed to put forward was that there should be some limit to the amount of rice which Burma might import into Madras.

Chairman.—Madras is free to export any of its commodities to any Indian province it likes; and therefore if any province moves the Government of India to restrict the rice of Madras, that will have to be done by agreement with Madras or by the Government of India taking powers to enforce its decision on Madras.

Mr. H. M. Hood.—The intention was of course this. A great deal of rice is coming into Madras from Burma, and if it could be restricted, there would be some chance of getting the price of Madras rice raised. That is the object of the whole thing. Of course, I can see that there are serious difficulties.

Chairman.—You do not think that on the whole the Sub-Committee was right?

Mr. H. M. Hood.—I do not wish to press this matter further now, Sir,—I should prefer to leave it to the Government of Madras to make further representations to the Government of India if they wish to do so.

Chairman.—Is there any other point relating to rice which members would like to take up?

Mr. A. D. Gorwala.—I would urge that it be noted that where the alteration in railway rates affects the movements of rice of another province, both the provinces or all the provinces concerned should be consulted; for instance, if two provinces are competing in the same article, then, if you alter the rates from one place to a port, it is going to affect the marketing of the other province. Consequently the other province should also be heard and its objections noted before the Railway Board comes to any decision. That is all I want.

Mr. N. D. Calder.—Yes.

Chairman.—Coming on to wheat (Part II of the Note) is there any province which is prepared to sponsor the proposal on page 9 that, keeping in view the world position as regards the production of and trade in wheat, it is undesirable that the area under wheat in India as a whole should exceed 33 million acres?

Mr. P. B. Richards.—Speaking in my private capacity and not in any way committing my *Government*, I wish to draw attention to the possibilities which might have arisen in the past season. The United Provinces, normally, has a wheat crop of about 7 million acres. In the current season its wheat area was some one million one hundred thousand acres above the normal. Somewhat similar, but not to quite the same percentage of increase, was the case with other wheat producing Provinces. It is a fact that our wheat production this year is expected to be about the normal, but that is a accident. Had it not been for frost and heavy rust attack and dry hot winds, there would have been a bumper crop in the United Provinces. There would have been a bumper crop in other areas also, and, instead of, so far as India itself is concerned, a crop which she could reasonably expect to consume, there might well have been a crop very much in excess of Indian requirements. The figure of 33 million acres was based upon average yields and estimated average consumption. I would not press for any motion by this Conference upon the proposal which was turned down by a majority in the Sub-C[illegible] Provincial Governments and [illegible] so far as it is in their power [illegible] in the total figure proposed in the resolution.

Chairman.—Have you any figure in mind as to estimated consumption? So far as the estimated area under crop is concerned, your estimate is subject to verification? So far as the estimated consumption is concerned, is there any basis for the estimate?

Mr. P. B. Richards.—Since the cessation of rail and river-borne trade returns, it is only possible to guess, but it appears that in a normal year the United Provinces is able to export something like two hundred and forty thousand tons to deficit Provinces which have been able to consume it without difficulty and without any local depression in prices.

Chairman.—Is not the estimated consumption on the basis of some price the lowering of which price may lead to increased consumption?

Mr. P. B. Richards.—That is a matter upon which I am not competent to pass any opinion; that is a matter for economists.

Chairman.—In other words, is it contended that all who want to eat wheat at the prevailing price get it and are able to buy it?

Mr. P. B. Richards.—All who want to eat wheat at the prevailing prices get it to the extent that they are able to buy it, but not all to the extent of their bodies' satisfaction. If it were cheaper, there would probably be greater consumption; but the attitude which was adopted in the Sub-Committee was that we must consider economic prices as well as the well-being of humanity.

Chairman.—In case that proposal is adopted, how many millions of acres would United Provinces take off from two millions?

Mr. P. B. Richards.—We have been in excess by 1,100,000 but as to how it would be possible to induce the cultivator, I cannot say.

Chairman.—Your basis of reduction provincially would be the percentage on the area under wheat?

Mr. P. B. Richards.—It seems that the United Provinces is responsible for about half the increase in acreage of the past year. I would be prepared to recommend to Government to take every possible step to reduce the acreage to normal.

Mr. W. J. Jenkins.—"The supporters of the resolution advocating restriction of the wheat area in India have endeavoured to establish a relationship between the total acreage of wheat in India and the internal consumption. They have pointed out that, owing to the import duty, there is at present no export for surplus wheat produced in India as the price in India is so much above world parity. They recommend restriction in view of the possibility of larger crops in future and the consequent effect on prices. But there are two sides to this picture and it is quite possible that we might have one or more bad years in the future when the wheat produced in India would not be sufficient for internal consumption. In addition, it is quite possible that a revival of the wheat export trade may occur in future. Accordingly, I consider it an extremely dangerous thing to lay down any kind of restriction on the area under wheat in India as it is one of the most important food products of the country".

The Hon'ble Sir Miles Irving.—I think the point should be made clear as to what we mean by our standard of consumption. Does it mean what people would like to eat or what they have the money to pay for. In point of fact if you take a ton of wheat as food for a family of four people it

would work out that the present wheat crop would feed only 44 million people out of a population of 350 millions in India. It has also been proved that the dietary of non-wheat eating countries is not so good as that of the Punjab and it would benefit people as a whole if the eating of wheat were extended. In fact Punjab would like to have a campaign to "eat more wheat". We are prepared to supply wheat at a reasonable price. The whole question before us in the Punjab and probably all over India is the question of price. Whether the supply has affected the prices very much I rather seriously doubt but the prospects of a bumper crop undoubtedly have some effect on the market, but depression does not seem to bear a strict proportion to the fluctuations which arise from other causes and to my mind this factor does not seem to have been calculated. There are also interesting figures in the Punjab which show that in the Punjab alone the cultivation of wheat has decreased proportionately to the total crop of cereals. Twenty years ago on a five years average the cereals were 75 per cent. of the total crop, we have now 70 per cent. Wheat used to be 3.16 of the total crop but it is now 3.06 and at the same time if you take the graphs of wheat production and population, the population has outstripped in the Punjab the consumption of wheat. Therefore, I think it is very unsafe to say that we have come to the end in India of what is a reasonable amount of wheat we ought to grow. The problem lies in other directions in finding out how the purchasing power of the people could be improved.

Mr. B. C. Burt.—I submit that the position of wheat is a special one in this way that for several years the Government of India has maintained a deliberately artificial price for wheat by means of an import duty which has definitely prevented the country from exporting any surplus because of the high internal price. The import duty cannot be effective in maintaining the internal price if you get an unmanageable surplus. Those who support the proposal have placed the maximum consumption under present condition at 9½ million tons and that is an optimistic figure, arrived at from the average during the last three years In 1929-30 we had a record crop of 10½ million acres and early in 1930, the Commerce Department and the Research Council made independent calculations of the internal consumption of wheat from a consideration of the import and export figures and the crop figures. This was possible because we were able to deal with a series of years at the start and end of which stocks were clearly at a minimum because there was a change over from an exporting to an importing position. That calculation gave a figure between 8.5 million tons and 8.8 million tons per annum. Both departments were agreed on that figure. That was over a prosperity period. Following the large crop of 1929-30 and of course Russia's eruption into the world wheat market, there was a tremendous fall in prices. There is no question at all that we have been able to absorb during the years that have followed 1930 something very close to 9½ million tons. There is no indication that the 10½ million crop was not absorbed gradually as the fall in prices passed away when the import duty came on ; the crops which have followed have been between 9 and 9½ million tons. The estimated consumption of 9½ million tons per annum is confirmed by the consumption calculated by the Statistician to the Research Council from population changes and assuming a straight line trend giving an annual increment of about 90,000 tons per annum. But there is this further difficulty. In 1930-31 wheat prices had fallen sharply but labourers wages were still high. Wages are now beginning to fall and the stimulus to increased consumption of wheat which is one of the superior food grains must gradually disappear.

There is now an organised attempt to bring down the rates of urban labour and agricultural labour has fallen. Far from assuming that our consumption of wheat of 9½ million tons will increase by 90,000 tons a year there is every risk that it might slip back. Therefore it was quite a generous figure that we took. Now it is estimated by our statistician, from the same calculations, that present stocks of wheat in India amount to some 600,000 tons. This may not seem much for a country like India producing and consuming 9½ million tons of wheat annually but my own feeling is that in March last stocks were as large as the wheat trade in India considered healthy. If we look at the course of prices, we see that wheat prices fell sharply as soon as there was a prospect of a really big crop, *i.e.*, as soon as the Government figure for the wheat area was known. Trade estimates are from 2 to 3 weeks ahead of the Government forecast for the simple reason that they get immediate reports from which they make up their own forecast as to what the position will be. It was not until the effect of frost and cold and the unseasonal cloud during the last month of the crop became obvious that prices began to recover. That seems to me a clear indication that the wheat trade in India considered that we had reached the danger point and that with a record area of 35 million acres were likely to have an unmanageable surplus. This acreage on reasonably average yields would have given a crop of 11 million tons and with export closed in addition of over a million tons surplus to a carry over of 600,000 tons would have been a serious problem. Therefore I think it would be wise to limit our wheat production to 33 million acres in itself a generous figure because the bumper crop of 1929-30 was 10½ million tons on an acreage of 31.6 million acres so that there is a very big margin in hand. While I have every sympathy with those who would increase the consumption of all cereals by all classes of population, we must not forget that if wheat prices fall the man who would go hungry is the cultivator because in all the major wheat producing provinces a certain amount of wheat has got to be sold to pay rent, irrigation dues and the like. If prices fall the quantity which he has to sell increases and it is not the urban labourer who is likely to go short but the cultivator. I do think that when Government is taking special action to maintain internal wheat prices, it would be a great mistake on the part of wheat growers not to take full advantage of it by limiting the production of wheat to what is required for internal consumption. If we are going to depend entirely on an increase in consumption surely we ought to remove the wheat import duty and let prices slip down to world level and let all consumers benefit. Already protests against the import duty have been made in the Assembly against the wheat import duty on behalf of the wheat importing provinces. I do not think the wheat producing provinces can expect to have it both ways and I do think that some serious plan on the lines suggested by Mr. Richards is urgently called for.

Rai Bahadur B. B. Mukharji.—One point I wish to urge is that so far as Bengal is concerned the consumption of wheat has increased. As a matter of fact we are confronted with the solution of one of the most important national provincial problems as to how to arrange for the national diatetic. There is an organised movement carried on by the Students' Welfare Committee that wheat should be one of the main items on the diatetic. As a matter of fact our social habits are also changing. If I were addressing a conference wholly of Bengalis I would remind them of the adage and the question which used to be put whenever a person used

to go out for invitation whether 'chira' came at the beginning or at the end, that is whether it was (chira) rice throughout or at the end. I am sure no one would care to go to a dinner if there was rice right through and even the cultivators are now taking a lead. There is a definite movement in Bengal for adding wheat as an item in the diatetic of the people. I think it would be very unfair if there be any embargo so as to make the price higher than what the ordinary consumer would be able to get at. And though as a wheat producing province we stand low and we would not object to what is good for India, I do submit that wheat is gradually gaining in importance as an item of diet, and if it comes in I would rather welcome it.

Chairman.—If there is nobody in support of the proposition on page 9, barring the Director of Agriculture of the United Provinces in his personal capacity, we may take it that it is dropped. We will now proceed to the second one.

Mr. A. D. Gorwala.—Mr. Jenkins informs me that he did not agree to the whole of this. He agreed that efforts should be made to substitute other crops for wheat but he did not agree that no fresh stimulus should be given to the expansion of wheat cultivation. As a matter of fact it is difficult to understand what fresh stimulus means.

The Hon'ble Sir Miles Irving.—I do not think this formula will be acceptable. This difficulty about wheat is very largely a matter of inter-provincial competition and the prospect of the Sukkur Barrage throwing in two million acres is a very serious matter. The Sind representative suggests that if anyone is going to restrict its wheat, the Punjab had better begin. I don't think competition on those lines between the provinces is going to lead to any fruitful results. We do not see any possible way of changing the course of cultivation in our canals more than has been done already. As I have pointed out the production of wheat in the Punjab is going down very rapidly on unirrigated lands The trouble before us is what we are going to do with the extra 2 million acres that Sind is going to produce. I do not suppose any Government could really agree to the Resolution as it stands.

Mr. A. D. Gorwala.—The point at issue is the difficulty of finding a substitute for wheat. The fall in prices has not been restricted to any particular commodity. The general level of prices has dropped. It is a fundamental principle of economics that movements in general prices are primarily caused by monetary influences, and the mere substitution of one crop for another is not likely to have any effect on the situation. The farmer should find his just remuneration in the regularity of prices enabling him to reckon on a legitimate return equivalent to that accorded to other producers. Unfortunately the formulation and execution of such a policy is outside the power of the farming classes. In this matter, their fortune lies in the hands of statesmen and bankers who control the purchasing power of money. If, however, it is felt that the quantity of wheat should be restricted why should not the Punjab take action ? The Punjab is the nursery of good agriculture and it will be much easier for the experienced and clever Punjabi cultivator to switch over from one crop to another than for the Sindhi agriculturist, who is yet learning his work.

I cannot dictate to a farmer what he should grow. If I insist, then in case of failure, the responsibility is mine. Oilseeds is a new crop difficult to grow and much more easily affected by frost than wheat. The responsibility of insisting that the zamindars in Sind shall grow other crops rather than wheat—to the growing of which they have been accustomed for ages—is, in view of the prevailing prices and the uncertainty of the future, not one which any Government ought to undertake. Moreover, the carrying out of any such restriction programme is not practicable. With reference to the Resolution we will agree to the second portion that every effort should be made to substitute other crops for wheat. But as regards the stoppage of fresh stimulus to the expansion of wheat cultivation, if fresh stimulus means that the acreage under wheat is not to be increased, then we must respectfully object. Our Agricultural Department is, of course, placing facts before the zamindars showing the usefulness of various alternative crops. We are prepared to do all we can to encourage more profitable cultivation, but we cannot accept the policy of restricting wheat. We might perhaps be prepared to agree that in the future no new schemes shall be undertaken which are likely to lead to an increase in the wheat area, it being clearly understood that new schemes do not mean full development of existing projects.

Dewan Bahadur T. Raghaviah.—The idea was the same as in the case of rice that no fresh irrigation project or fresh canal should be constructed which will have the effect of increasing the area under wheat. About the existing areas they could increase to their maximum capacity.

The Hon'ble Sir Miles Irving.—Punjab must oppose that. It has one or two projects that may possibly be taken up and they would inevitably result in a certain area being placed under cultivation, and the Punjab Government could not agree to an embargo of this description.

Mr. J. H. Ritchie.—Central Provinces is not concerned with this. We are not likely to start any irrigation projects. There is no irrigation project at all in the Central Provinces. The area fluctuates from year to year according to the soil at sowing time.

Mr. P. B. Richards.—In principle I support this ; but in the course of the discussion in the Sub-Committee, the question arose whether small minor projects were included such as the September flooding of comparatively small areas in which rainfall was in defect. One would like to see such small projects excluded. Over precarious tracts, it is under consideration whether surplus canal water cannot be utilised to make good defects in rainfall in order to prepare them for wheat or other rabi crops. I would like the resolution to be a little less rigid if it is likely to exclude investigation or actual operation upon such comparatively minor areas.

Sir T. Vijayaraghavacharya.—What is the limit of the minor area ?

Mr. P. B. Richards.—It may be only a matter of 5 or 10 thousands acres but as the resolution stands it precludes this.

Mr. B. C. Burt.—That is not a stimulus to fresh wheat cultivation at all. It is merely protecting the existing acreage.

Mr. P. B. Richards.—As long as that is understood I have no objection.

Dr. W. Burns.—We are on the horns of a dilemma. On the one hand the situation has been explained by Mr. Burt. On the other hand, we have the commitments of the Punjab and the Sind Governments which appear to indicate that there will be an expansion of wheat. I would like to quote again, if I may be tolerated, the following very apposite quotation from an article by George Pavlovsky published by the International Institute of Agriculture in their Monthly Bulletin of Agricultural Economics and Sociology :

" The prices of these products on markets so effectively isolated from foreign competition came thus to depend entirely on the relations between the home supplies and the internal demand, and the price level could be kept higher than in countries not so well protected. As an outstanding example of such price autonomy, one can point to the prices in wheat in Germany, France or Italy. In all these countries, and especially in Germany, the rates of general duties on wheat exceed more or less considerably the current prices of imported wheat in London and Liverpool, and other restrictions are also in force. In all these cases the wheat prices on the national market depend essentially on home supplies, and, unless there is over-production at home, they can be maintained at a level which makes wheat-growing remunerative. Yet, it cannot be said that the policy of autonomous price formation has generally succeeded in solving the agricultural price problem on the markets in which it has been applied. Indeed, though the level of prices has been maintained on a higher basis than in other countries, its gradual decline could not be prevented, and farmers continue to suffer from falling prices. This general tendency of the prices of farm products to decline is the natural effect of the all-round diminution in the purchasing capacity of the masses of consumers caused by the general economic depression which is itself largely due to the disintegration of the world market into isolated national economies ".

Sir, it seems to me that from the facts that have been placed before us, we may look forward to a further fall in prices.

Chairman.—I think we had better continue this discussion tomorrow.

The Conference then adjourned till 10 O'clock on Saturday, the 9th June 1931.

I cannot dictate to a farmer what he should grow. If I insist, then in case of failure, the responsibility is mine. Oilseeds is a new crop difficult to grow and much more easily affected by frost than wheat. The responsibility of insisting that the zamindars in Sind shall grow other crops rather than wheat—to the growing of which they have been accustomed for ages—is, in view of the prevailing prices and the uncertainty of the future, not one which any Government ought to undertake. Moreover, the carrying out of any such restriction programme is not practicable. With reference to the Resolution we will agree to the second portion that every effort should be made to substitute other crops for wheat. But as regards the stoppage of fresh stimulus to the expansion of wheat cultivation, if fresh stimulus means that the acreage under wheat is not to be increased, then we must respectfully object. Our Agricultural Department is, of course, placing facts before the zamindars showing the usefulness of various alternative crops. We are prepared to do all we can to encourage more profitable cultivation, but we cannot accept the policy of restricting wheat. We might perhaps be prepared to agree that in the future no new schemes shall be undertaken which are likely to lead to an increase in the wheat area, it being clearly understood that new schemes do not mean full development of existing projects.

Dewan Bahadur T. Raghaviah.—The idea was the same as in the case of rice that no fresh irrigation project or fresh canal should be constructed which will have the effect of increasing the area under wheat. About the existing areas they could increase to their maximum capacity.

The Hon'ble Sir Miles Irving.—Punjab must oppose that. It has one or two projects that may possibly be taken up and they would inevitably result in a certain area being placed under cultivation, and the Punjab Government could not agree to an embargo of this description.

Mr. J. H. Ritchie.—Central Provinces is not concerned with this. We are not likely to start any irrigation projects. There is no irrigation project at all in the Central Provinces. The area fluctuates from year to year according to the soil at sowing time.

Mr. P. B. Richards.—In principle I support this ; but in the course of the discussion in the Sub-Committee, the question arose whether small minor projects were included such as the September flooding of comparatively small areas in which rainfall was in defect. One would like to see such small projects excluded. Over precarious tracts, it is under consideration whether surplus canal water cannot be utilised to make good defects in rainfall in order to prepare them for wheat or other rabi crops. I would like the resolution to be a little less rigid if it is likely to exclude investigation or actual operation upon such comparatively minor areas.

Sir T. Vijayaraghavacharya.—What is the limit of the minor area ?

Mr. P. B. Richards.—It may be only a matter of 5 or 10 thousands acres but as the resolution stands it precludes this.

Mr. B. C. Burt.—That is not a stimulus to fresh wheat cultivation at all. It is merely protecting the existing acreage.

Mr. P. B. Richards.—As long as that is understood I have no objection.

Dr. W. Burns.—We are on the horns of a dilemma. On the one hand the situation has been explained by Mr. Burt. On the other hand, we have the commitments of the Punjab and the Sind Governments which appear to indicate that there will be an expansion of wheat. I would like to quote again, if I may be tolerated, the following very apposite quotation from an article by George Pavlovsky published by the International Institute of Agriculture in their Monthly Bulletin of Agricultural Economics and Sociology :—

" The prices of these products on markets so effectively isolated from foreign competition came thus to depend entirely on the relations between the home supplies and the internal demand, and the price level could be kept higher than in countries not so well protected As an outstanding example of such price autonomy, one can point to the prices in wheat in Germany, France or Italy. In all these countries, and especially in Germany, the rates of general duties on wheat exceed more or less considerably the current prices of imported wheat in London and Liverpool; and other restrictions are also in force. In all these cases the wheat prices on the national market depend essentially on home supplies, and, unless there is over-production at home, they can be maintained at a level which makes wheat-growing remunerative. Yet, it cannot be said that the policy of autonomous price formation has generally succeeded in solving the agricultural price problem on the markets in which it has been applied. Indeed, though the level of prices has been maintained on a higher basis than in other countries, its gradual decline could not be prevented, and farmers continue to suffer from falling prices. This general tendency of the prices of farm products to decline is the natural effect of the all-round diminution in the purchasing capacity of the masses of consumers caused by the general economic depression which is itself largely due to the disintegration of the world market into isolated national economies ".

Sir, it seems to me that from the facts that have been placed before us, we may look forward to a further fall in prices.

Chairman.—I think we had better continue this discussion tomorrow.

The Conference then adjourned till 10 O'clock on Saturday, the 9th June 1934.

PROCEEDINGS.

Saturday, the 9th June 1934.

The Crop Planning Conference met in the Members Room of the Legislative Assembly Chamber at 10 a.m., the Honourable Khan Bahadur Mian Sir Fazl-i-Husain in the Chair.

Chairman.—When we adjourned yesterday the discussion was going on about wheat and the particular proposition, namely, no fresh stimulus should be given to the expansion of wheat cultivation in India, was under discussion. Objection was taken by the Punjab and Sind to that proposition and, if I am not mistaken, Bengal sympathised with that objection. It was at that stage that we adjourned. Discussion will now proceed from that stage.

The Hon'ble Sir Miles Irving.—May I somewhat amplify the position as regards this case. The position of the provincial representatives in this conference is somewhat difficult, as we are not in the position merely of giving advice but have to guard against our Government being bound to what we say, and therefore as the Punjab Government may see some possibility of schemes for producing wheat in the future, it is impossible to agree with the proposition that no fresh stimulus should be given to the expansion of wheat cultivation in India. But we want to put our cards on the table about this very important question of Sind and, if you like, also the proposed additions to irrigated areas in the Punjab. Supposing the wheat supply is now stabilised and it is proposed to market in the near future a very large supply from Sind, it will obviously be a disturbing factor. The Punjab proposes also to construct other works as, for instance, the Bakra Dam canal, which might not add to the area of wheat but which would certainly help the production of it. The Bakra Dam will substitute for one crop in three years of 5 maunds per acre a crop every year bearing 12 maunds.

Chairman.—In that case we might reasonably reduce the area. As Barani, it would produce nothing but wheat, while, as irrigated, it might produce cotton as well. You are now talking of what will happen at least 10 years hence.

The Hon'ble Sir Miles Irving.—I am rather guarding myself because I could not get up and say anything which would commit the Punjab Government in any way. But I am naturally thinking of Sind which affects the Punjab very closely and also the other provinces in India to a certain extent.

Chairman.—But the resolution is about 'fresh stimulus' and the interpretation put on it by the mover of the resolution was that in Sind the stimulus was given three or four years ago.

The Hon'ble Sir Miles Irving.—If that is the position, then, of course, the Punjab Government would say that we are helpless. We can only say that in order to meet the fallen price of wheat we should have to consider more remissions.

Chairman.—Nobody, of course, could say that. At that time wheat export by India was operating.

The Hon'ble Sir Miles Irving.—I am not blaming anybody.

Chairman.—Punjab would have required a rich neighbour to exploit rather than a poor neighbour.

The Hon'ble Sir Miles Irving.—I am only explaining the situation. As a matter of fact, our view is that as there is already enough land under wheat, it is time for Sind to think of something else.

Chairman.—That is exactly the question. Both the Sind speakers invited the Punjab to advise them if they could suggest any better crop than wheat which was equally good and as easy to grow.

The Hon'ble Sir Miles Irving.—Our suggestion to Sind is oilseeds. They have the market at their door.

Chairman.—That is going to be discussed later on.

The Hon'ble Sir Miles Irving.—On the question of stimulus, if Sind is putting these fresh acres under wheat, all we can say is that we cannot bind ourselves as regards our future measures of retaliation. We understand Sind's case sympathetically but we also feel that Sind now holds the position. By its action now, in the next few years it will enormously effect the wheat crop and the finances of the country, and therefore our hope is that Sind may find its way—even this Conference may find its way to advise Sind to take up some other crop than wheat.

Mr. A. D. Gorwala.—May I ask the Honourable Member from the Punjab what measures he proposes we should take to compel farmers to grow a particular kind of crop ? Can he do it in the Punjab ?

The Hon'ble Sir Miles Irving.—Now that you are giving out Government lands on conditions under the Colonisation Act, in the same way as the Punjab.

Chairman.—Colonisation in Sind is quite different from colonisation in the Punjab. In the Punjab, by far the largest area belongs to Government and Government gives away areas or sells or leases. In Sind, by far the largest area belongs to individual proprietors

The Hon'ble Sir Miles Irving.—The position is very much the same as ours. There are probably no coercive methods ; these are methods of advice. I think it will be to the interest of the zemindar to cultivate oilseeds Also, there are the methods of water rates and land revenue rates which may to a certain extent give the stimulus.

Mr. B. S. Kamat.—On the question of stimulus, I think this Conference ought to be satisfied if after the word " stimulus " we add some such words as : " but no fresh stimulus such as by way of major irrigation projects should be given to the expansion of wheat ". The object of making this explicit is to prevent Local Governments from going ahead with large irrigation projects. Personally I think it is not worth while for this Conference now to disturb the commitments which Local Governments already have accepted. Whether it is the Government of Sind or Punjab, it is exceedingly unfair to try to disturb those commitments and it would not be wise to do so. So, the whole object would be gained if after the word " stimulus " we add, " no fresh stimulus such as by way of major irrigation projects ".

Rai Bahadur B. B. Mukharji.—There will be a little objection from the Bengal Government to that, Sir. About 97 per cent. of our land only bears one crop. We are being charged by various public bodies that the Bengal Government is not looking after irrigation. You may remember the great controversy which took place a few years ago in the Press in which Sir J. Wilcox took part. They definitely charged the Government of Bengal with neglecting irrigation in Bengal. I may inform this Conference that there is now before the Government of Bengal an Irrigation Bill by which it is sought to raise money from the public or from the land benefited and construct irrigation works.

The Hon'ble Sir Frank Noyce.—You are not going to grow wheat under this ?

Rai Bahadur B. B. Mukharji.—Not definitely. If you mean irrigation works specifically for wheat, I am prepared to accept it. But if you say, " stimulus by way of all irrigation works ". then I do not agree. If it is intended that no stimulus should be given by constructing irrigation works specifically for the cultivation of wheat, I am prepared to accept it ; otherwise, it is very difficult for my Government to accept it.

Chairman.—May we have a statement from somebody as to what the prices of wheat are in the chief wheat producing countries of the world ? Prices in Indian Currency would be preferable ; otherwise in English.

(The statement was promised later on.)

Mr. W. J. Jenkins.—Sir, with regard to what Sir Miles Irving just said, I should like to make it quite clear that we in Sind are definitely attempting to grow substitute crops for wheat. I have the authority of my Government to say that they are prepared to co-operate with any scheme which would involve the substitution of other crops for wheat provided that these other crops are more paying. That is the most important proviso.

Chairman.—Or equally paying.

Mr. W. J. Jenkins.—We in Sind have very heavy obligations to meet, and we cannot assent to any proposal which is going to handicap us in meeting those obligations. I must respectfully point out that it is rather inconsistent for the Punjab representative to oppose this resolution on the ground that large irrigation projects in the Punjab may come to fruition in a few years and at the same time to ask us in Sind to restrict our area under wheat. It seems to me that these are two points of view which cannot easily be reconciled. With regard to substitution, we heard from Sir Miles Irving yesterday that the area under wheat in the Punjab is decreasing. [*The Hon'ble Sir Miles Irving.*—Proportionately.] It seems reasonable to suggest that it will be much more easy to substitute a crop which is decreasing than to substitute one which is increasing by leaps and bounds. We have heavy obligations to meet ; we cannot agree to anything which is going to handicap us in meeting those obligations.

Mr. A. D. Gorwala.—May we know something about the retaliatory measures which the Punjab proposes to adopt ?

The Hon'ble Sir Miles Irving.—Perhaps that was not a happy word. I meant the construction of further irrigation schemes.

The Hon'ble Sir Frank Noyce.—As regards irrigation projects, we are arguing an academic question. We are now dealing with an immediately

urgent problem. If you undertake fresh irrigation schemes, they are not likely to be completed for 5 or 10 years and the position then may have completely altered.

Mr. M. Vaidyanathan.—Sir, The Canadian wheat in Winnipeg sells at Rs. 2-1-9 per maund ; in New York the price is Rs. 2-2-6 per maund ; in Australia it is Rs. 2-2-0 per maund. In Liverpool the present quotation is about Rs. 2-8-0. For Argentine, the figure is not handy.

Chairman.—So far as the Punjab and Sind are concerned, their prices are below the price of wheat in any of these places. Therefore, the statement that the prices of wheat in India are being fictitiously kept up is not quite correct in the usual acceptance of that phrase. The only effect of the Wheat Duty Act is to protect Indian wheat from the onslaught of Australian wheat. But Australia does not sell wheat in Australia any cheaper than Punjab and Sind do in the Punjab and Sind. Australia has the advantage of cheap sea freight : Indian has the disadvantage of expensive railway freight. So, I do not think there is much in that. We are producing wheat more or less at the same selling price in the country as other countries. But our situation and the vastness of the country do not permit of our being able to export. Now, what about this resolution ? "Fresh stimulus should not be given to the expansion of wheat cultivation ". In a way, it is more or less an axiomatic truth. In other ways, it is binding Government from starting upon any venture as a part of which expansion of wheat area may be involved It may be considered as restrictive. Is it not possible for us to arrive at a formula which would serve the purpose ? What is our power over the provinces ? To give good advice. But till we have armed ourselves with the requisite legislative power, we could not force our advice on provinces. Can anybody suggest a formula which might serve the purpose ?

Rao Bahadur Narasimha Raju.—In the case of rice, the Conference adopted an advisory resolution for the provinces. I think the whole problem will be at an end if we adopt a similar phraseology in the form of an advisory resolution regarding wheat as well.

Chairman.—Will you kindly listen to this as a possible formula to serve as a basis of discussion ? " That the present world conditions in the matter of wheat production and that the Wheat Import Duty Act is an annual measure (not permanent) are two facts which should be borne in mind by Provincial Governments which contemplate schemes involving expansion of the wheat area " that is, not schemes which are intended to increase it but which involve the expansion of wheat. As a matter of fact these are the only two factors which compel us to give this advice, first the world condition, and the second that the Central Government has to keep this Import Duty Act going, which I think justify our more or less prominently bringing to the notice of Provincial Governments this advice. Do you think any Provincial Government could reasonably object to it ?

The Hon'ble Sir Miles Irving.—I think no Government can object to being given advice.

Rao Bahadur Narasimha Raju.—And increased production of wheat as well.

Chairman.—That would not be fair. That would prevent the activities of the Agricultural Department.

Sir T. Vijayaraghavacharya.—That would be against scientific advance.

Chairman.—I take it that the Conference would prefer to substitute this for what we were discussing under this head. The Conference agreed.

To this Resolution the statement of prices which has been given by our expert had better be appended ; and I trust he will be able to give us Argentine prices too.

We are at page 10 of this Note. The next point is external markets and the Note says that there is no immediate prospect of capturing them. That I think is an accurate description of the situation. As to internal markets the matter has to be left as in the case of rice to the Marketing Board. As regards railway freights, the same observations as in the case of rice. Paragraph 4 of Part II of the Note. The Sub-Committee unanimously recommend the creation of a Standing Committee on wheat of the Advisory Board of the Imperial Council of Agricultural Research on the same terms as those suggested for the Committee on rice. Any observations on this, gentlemen ?

Mr. W. J. Jenkins.—I should just like to ask if it could be recorded that in view of the importance of wheat trade to Karachi a commercial representative from Karachi should be included on this committee.

Sir T. Vijayaraghavacharya.—It is a matter for the Advisory Board to consider.

Chairman.—I take it that the Conference endorses paragraph 4 of Part II at page 10 of the Note. This concludes the Note on wheat. But before we go on to the next item, I shall be glad if any member has to offer any observations on wheat in general. (No member had any observations to make.)

Then we proceed to cotton, Part III of the Note. The Note says that the questions to be considered are two, namely, increase in the total area and the selection of varieties, and we are told that a Sub-Committee of the Indian Central Cotton Committee is engaged in pursuing these two matters. So far as discussion on cotton at this stage is concerned, perhaps the Conference will be satisfied with this remark ; but I believe the Conference expects our expert in agriculture to tell us later on when the question of substitution comes what is the extent of area that he considers can be suitably brought under cotton during the next few years without impairing the prospects of a good price for cotton or at all events of the price that has been prevailing during the last two or three years. That is so far as the area is concerned. No doubt the cotton committee is pursuing the question of selection of varieties, but perhaps Mr. Burt will tell us what stage these enquiries have reached.

Mr. B. C. Burt.—Well, Sir, the Central Cotton Committee set up a Sub-Committee to discuss this question in consequence of the temporary boycott of Indian cotton by Japan and decided that it must go on and see whether it is possible to make India less dependent on one single large buyer. The Committee has met and has made two specific recommendations so far—both of very considerable importance. One is that every effort should be made to extend the medium staple type of cotton known as Verum in the Central Provinces. That is a cotton produced as a result of one of the Central Cotton Committee's own research schemes. It has

already proved successful both to the cultivator and to the Indian mills, and what is required is a greater effort to extend this cotton in all suitable areas in that province That is a recommendation with which the Central Provinces Agricultural Department are in complete agreement and every thing possible is being done

The second important recommendation which the Sub Committee made was in regard to Sind It was to the effect that a special long staple cotton area should be developed in Sind Sind has always been spoken of as a potential long staple cotton area and the Indian mills very badly need a greater supply of staple cotton which Sind could profitably provide The Committee recommended that some such area as would produce about 3 00,000 acres annually of cotton (which would produce under Sind conditions about 1,50 000 bales) should be reserved for long staple cotton growing I think I am correct in saying that the total area to be brought under cotton on the Barrage is about 7,50,000—not quite so much as that That recommendation is at present under the consideration of the Sind Agricultural Department and Mr Jenkins can tell us that there has been a very considerable progress already in that direction Those are the two recommendations which the Committee has made up to the present and they are further considering the matter (*Honourable Sir Frank Noyce* Who will buy the cotton ? The Indian mills mostly ?) The cotton will be suitable both for the Indian mills and for export to the United Kingdom

Mr W J Jenkins—Before we leave this question, I should like to know whether it will be competent to suggest to this Conference a recommendation to the Government of India that an amendment of the Cotton Ginning and Pressing Factories Act should be made which will enable the licensing of ginning and pressing factories to be introduced in such provinces as consider that desirable in the interest of the extension and marketing of better cotton We in Sind are making a big effort to grow cotton which is at present being imported into India from abroad and we feel—and I think every province which has the matter at heart will feel—that such a measure will go a long way to help us When the Cotton Ginning and Pressing Factories Act was passed this enabling clause was omitted I think conditions have changed since then and the opposition which was evident at that time would not be so strong now There are a large number of ginning factories in Sind and still more are being put up (*Chairman* Are they of more than 2 years' standing ?) About three fourths of them are old factories The position is changed in Sind The Sind Cotton Committee is to meet on the 14th of this month to decide whether the time has not arrived to stop the construction of new ginning factories on the Barrage areas

The Hon'ble Sir Frank Noyce—Your view would be that the licensing of ginning presses is an essential factor in improving the marketing of cotton

Mr W J Jenkins—Yes

Sir T. Vijayaraghavacharya—The Central Cotton Committee has already made that recommendation The recommendation is now under examination in the Commerce Department, the Department of Education, Health and Lands and the Imperial Council of Agricultural Research

Chairman.—That is satisfactory. In my province there are ginning factories like Rest Houses at a distance of every 10 miles but many of them are not working !

Chairman.—Next we come to Jute. Part IV of the Note. Do you like to say anything, Mr. McLean ?

Mr. K. McLean.—I have nothing to say. The Report is under consideration of the Bengal Government.

Chairman.—The other provinces are not interested in it. We might leave it at that. Next we come to oil seeds. Part V of the Note. These have been dealt with under four heads,—A. groundnut and castor ; B. linseed ; C. rape, mustard sesamum and cotton seed, and then again D. linseed, castor, groundnut rapeseed and sesamum oils. As regards A. groundnut the recommendation (*a*) at page 11 says " That this Sub-Committee recommends that the Government of the United Kingdom be approached with a proposal to impose an import duty on all foreign fats, oils and oilseeds which compete with oilseeds produced in the Empire ". Does not anybody propose to make any observations on that ? ' No need for placing any restriction on its cultivation, but that there might be room for cautious expansion '. May I ask what is the quantity of groundnut exported ? In what quantity do our experts think groundnut can be further exported without reducing the price of the groundnut already exported ?

Mr. M. Vaidyanathan.—The actual quantities of exports of groundnuts from India were—

			Tons.	
1929-30	..	..	714,000	
1930-31	..	..	601,000	
1931-32	..	..	672,000	
1932-33	..	..	433,000	
1933-34	..	..	546,000	There is increase this year over last year's.

Chairman.—What have we been doing with the balance ? Have we been producing enormously ?

Mr. M. Vaidyanathan.—The estimated yield in tons in groundnut has increased from 2.7 million tons in 1929-30 to 3.2 million tons during the current year.

Chairman.—The Committee reports that there is no need for restriction, but there is room for cautious expansion. Will Mr. Burt kindly explain ?

Mr. B. C. Burt.—The internal market for groundnuts in India is extremely important. The internal market for the oil is expanding, and groundnut oil is the one oil which is being used by all the new hydrogenation plants which are producing Vanaspathi Ghee to replace imports of fats and other kinds of vegetable ghee. After going into the trend of exports and the increasing demand for internal consumption we came to the conclusion that there was room for cautious expansion, especially in those provinces where the groundnut area is not very large, and where it is very desirable as a rotation crop.

Chairman.—What would you place the increase in output at ?

Mr B C Burt—I don't think we can commit ourselves to figures yet

Chairman—If you are going to give advice to provinces to go ahead and increase the area under groundnut, you cannot say that you are not prepared to commit yourself to figures How do you expect the provinces to commit themselves in giving advice to the cultivators ?

Mr B C Burt—The position is this The two provinces which are really dependent on the export market are Madras and Bombay The Central Provinces, for example, the third greatest groundnut growing province, consumes the whole of its groundnuts within its own borders for crushing oil, and it finds no difficulty in marketing its oil Incidentally I might mention that there is an expanding export of groundnut oil

Chairman—I do want the conclusions of the conference to be definite enough to enable the provinces to act on them

Dr W Burns—I may state, Sir, that to give advice in such detail it would require a very much longer period of consideration than we have been able to give to this question, and also a great deal more consultation between the provinces themselves I agree that it is highly desirable at the present moment that we should merely indicate the general directions in which the expansion could take place The expansion actually in the two provinces mainly concerned, namely Madras and Bombay has been encouraging In Bombay in the year 1900 there were only 50,000 acres, whereas now there is about a million and two hundred thousand acres under cultivation That figure has remained fairly steady since about 1929 When groundnut does not pay, cotton tends to take its place, and when cotton does not pay, groundnut tends to take its place But undoubtedly there are in many places lands which can be put under groundnut cultivation if the prices remained steady The price has gone down, but it has not gone down to such an extent as to discourage people altogether from going in for groundnut cultivation I understood from the papers that this year there had been a reduction in the area in Madras That apparently is a mistake, because the figures have shown to us that there was no such reduction The press in fact went the length of saying that there had been 50 per cent reduction in some areas, but as far as I could see, speculation in this groundnut business affects the markets very greatly, because I have before me a letter from a banker which says that he is having a lot of worry just now owing to violent fluctuations in the price of groundnut Therefore if we have the prices jumping about so violently, growers of groundnut can't say where they are This is a factor which we have to take into consideration Apparently there is no falling off in Madras supply There is very little falling off if any in the Bombay supply, but we are not in a position to recommend restrictions, nor are we in a position to recommend exactly how the expansion should proceed

The Hon'ble Sir Frank Noyce—Could we not ask the Agricultural Research Department to work out something more definite in consultation with the provinces ?

Sir T Vijayaraghavacharya—As a matter of fact, all these subjects are taken up

The Hon'ble Sir James Grigg—I was very struck by a remark which fell from one of the speakers who said that the ryot is quite prepared to

grow cotton when groundnut does not pay, and to grow groundnut when cotton does not pay. That seems to indicate that the ryot knows his business quite well ; if only he can get the information quickly enough, he will be able to take the necessary action in time. The key to the situation is to give information to the ryot quickly enough.

Sir T. Vijayaraghavacharya.—We are setting up a Bureau of Information.

Chairman.—That is why I am afraid of a recommendation like this going out saying that there is room for cautious expansion. The person who is to derive the benefit may say—' Well, I am only adding a hundred acres,—that is quite cautious ' ; but if many hundred people do that, then the word ' cautious ' loses all its value.

Mr. H. M. Hood.—With regard to groundnut in Madras, I think I am right in saying that there has been no material reduction in the area under cultivation. We have been told several times that the quality of groundnuts in Madras is inferior, when I inquired of the merchants, they said that they did not think that the quality had deteriorated, but still something might be done to improve the quality of the groundnut. The decortication of groundnut leaves something, to be desired, and something might be done to see that there is no falling off in the quality of the decorticated seed.

Sir T. Vijayaraghavacharya.—We are setting up an Oil Seeds Committee which will deal with all these subjects, and we intend consulting the Madras Government about the constitution of this Committee.

Mr. H. M. Hood.—But the important question to be remembered is the question of depression in prices. I do not know whether anything can be done with regard to European markets, whether any action by the Government of India is likely to have any effect in regard to the restriction that has been placed on the import of groundnuts into, I think, France and Germany.

Chairman.—What is the percentage of produce that is actually exported to France and Germany ?

Mr. M. Vaidyanathan.—Out of a total export of 433,000 tons in 1932-33 roughly 50 per cent. to France and 11 to Germany.

Chairman.—I was asking what is the percentage of produce that is actually exported, and I find about 20 per cent. of the total yield is exported. About 80 per cent. is consumed in the country.

Mr. A. M. Livingstone.—There is an excellent Report on the groundnut position published by the Imperial Economic Committee in London. That shows that the consumption of groundnuts has decreased very largely in recent years largely owing to the utilisation of other substitutes for vegetable products, and particularly the use of whale oil, which is very largely used for making margarine. It has the power of absorbing and retaining a fairly large percentage of water, and so margarine manufacturers have been using whale oil instead of vegetable oil. The decrease in consumption of groundnuts, according to the Report, apparently came to an end in 1932, and actually the consumption of groundnuts in Europe in 1933 showed some increase. The Imperial Economic Committee come to the conclusion that there are other favourable factors apart from this

increase in consumption in 1933. They point out that the policy of several European countries is intended to raise the prices of their animal fats. such as butter and so on, and that if the price of butter is in any way put up they anticipate that the price of margarine will rise at the same time, which should assist in increasing the consumption of groundnuts and probably improving the price. They draw attention also to the possibility of groundnuts being used in some other ways. But they are very cautious in their conclusions, and therefore the Sub-Committee thought that they should be equally cautious when making any recommendation to the provinces. Apart from this world position the provinces should have regard to what they think is going to be the consumption within their own borders in the way perhaps of having more mills and increasing the output of the mills. They should take these factors together when deciding how far expansion of the groundnut area should go.

Chairman.—What was the total area under groundnut last year ?

Mr M. Vaidyanathan.—8.1 million acres as compared to about 6 million acres before the depression.

Chairman.—On the facts within your knowledge, if you were owner of 8 million acres and another 2 millions were available how much of those two millions would you bring under groundnuts ?

Mr. A. M. Livingstone.—I would wait and see if prices will rise.

Mr. B. C. Burt.—May I refer to one remark which Mr. Hood made ? When we were discussing the question in Sub-Committee the original proposal was that except in Madras and Bombay there was room for cautious expansion and on further consideration Madras and Bombay representatives considered that they should not stand aside because in Madras it was considered that the area would automatically react to the price and a similar effect would be likely in Bombay whereas there was legitimate room for expansion in other provinces. That is why the recommendation is in its present form. I would like to support the suggestion as to the need for more time before we can make any further recommendation.

Chairman.—For the present we cannot really advise people to bring more area under groundnut ?

Mr. B. C. Burt.—We cannot place a figure on it. We might put it in a negative way that in the Central Provinces which has been specially mentioned, where they are already increasing their groundnut area there is no reason for them to hold their hand.

Mr. J. H. Ritchie.—Our policy in Berar is to recommend groundnut as one of the rotation crops for cotton. As a result of the Botanical scheme financed by the Indian Central Cotton Committee we have found that cotton with groundnut and jowar in rotation gives an yield of nearly double the quantity of cotton. We have therefore been advocating this rotation to the cultivators and the area has gone up during the last ten years from 10,000 acres to 185,000 acres. I should like to see the groundnut crop reaching an acreage of 2 millions in Berar. I asked the Sub-Committee what effect this would have on the general situation, and we came to the conclusion that for the sake of cotton it is best that we should go ahead. But the area under groundnut will fluctuate very considerably with the price not only of cotton but of groundnut itself. This

year I think the groundnut cultivators made more out of groundnut than out of cotton with the result that there is likely to be a very big expansion. So far we have been in the position of being able to absorb and consume all the groundnut we produce. More groundnut comes into the province than goes out. I should like to have the approval of this Conference to the policy of extending groundnut in Berar.

Chairman.—We proceed to castor seed. The Sub-Committee considered that the position was satisfactory and that there was room for its development rather than for its restriction. Here again is it possible for us to say what is the extent of expansion that we visualise, or is it that we do not visualise the extent of expansion ?

Mr. B. C. Burt.—Castor seed is a crop which is bound to proceed slowly. It is only in a comparatively small part of India that it is grown as a main crop. The critical factor in expansion is the demand for high grade lubricants and what the Sub-Committee had in mind was that the position in regard to the demand for castor oil for high grade lubricants should be very carefully watched. This is almost an Indian monopoly. But there is keen competition of course from petroleum lubricants and it was considered important that the supply should be maintained and that development should be very carefully watched.

Chairman.—We are not in a position to tell the authorities that they can add so much.

Mr. B. C. Burt.—No, Sir. The Committee required more time to come to a conclusion.

Sir T. Vijayaraghavacharya.—There is the Oil Committee.

Rao Bahadur Narasimha Raju.—I wish to know how the prices of castor seeds have fluctuated during the last five years.

Mr. M. Vaidyanathan.—Before the depression it was Rs. 6, and now it is Rs. 4-1 0.

Dr. W. Burns.—I trust that the Oilseeds Committee which is to go into this question will seriously consider the future of castor oil as lubricant. We were told the other day in the Sub-Committee by Mr. Tait that it has the great advantage of not mixing with petrol and that this was the only oil for certain aero engines of the rotary type. If it is linked up with aviation there ought to be a big future for it, and that particular point should be looked into by the Oilseeds Committee.

Chairman.—We pass on to (*b*) of Part VA. It was pointed out that there had been great increase in the export of groundnut oil, especially to the United Kingdom after the grant of Ottawa preferences and that the question of stimulating the industry might be left to the Indian Oil Crushing Industry Committee. That does not give us any lead for the present.

Mr. B. C. Burt.—In a further part of this report we deal specifically with the subject and there are some recommendations as to the means by which increased export should be possible. Here we are only dealing with it as part of the groundnut problem.

Sir T. Vijayaraghavacharya.—It comes under General.

Chairman—Therefore under the head A of Part V, *Groundnut and Castor*, the definite and affirmative conclusion is that the Central Provinces is proceeding with a certain expansion of groundnut and that it may do so That is all

Mr B C Burt—There are other provinces which grow groundnut on a small scale.

Chairman—I did not say that they did not I said that the affirmative conclusion is only this—in the matter of expansion

Mr B C Burt—To the extent that we are not yet ready to put forward figures

Chairman—Part V B *Linseed* The large increases in the exports of Linseed to the United Kingdom since the grant of Ottawa preferences were pointed out and the Sub Committee emphasised the need for extending the cultivation of linseed in India, especially of the improved varieties It was also agreed that the favourable position in regard to linseed should be made widely known amongst cultivators and merchants. May we have some facts about linseed ? What is the area under cultivation and what is the output ?

Mr B C Burt—I have here the area for the production of linseed for a series of years In 1933 34 the area was 3¼ million acres and the estimated yield was 377,000 tons In the previous year the area was practically the same with a production of 406,000 tons The export in 1933 34 was 379,000 tons, and in the previous year it was 72,000 tons

Chairman—How much room, in your judgment, there is for more exports ?

Mr B C Burt—There is a regular market for export for 400 000 tons and there is internal consumption of 200,000 tons in round figures So that we can do with 600 000 tons of linseed which on past records would mean an addition to the area of about 2,000,000 acres

Chairman—Is that the conclusion with which the Sub Committee have agreed ?

Mr B C Burt—Yes

Chairman—Which are the provinces in their order of importance that actually produced linseed last year ?

Mr B C Burt—The Central Provinces is the most important province Other provinces are the United Provinces, Bihar and Orissa and Bengal Hyderabad State is also important

Chairman—Then it really comes to this that the Central Provinces, United Provinces, Bihar and Orissa and Bengal can go ahead in adding to their areas by about 50 per cent, leaving a little bit for other provinces I think that is a fair statement to make

Dr D B Meek—In this connection I would like to mention one point I do not wish to discourage the view that there is a possibility of good trade in linseed, but it must be remembered that the only competing country is Argentine and for the last two years they have been having very poor crops Therefore, this large expansion in our export might

have been influenced to a considerable degree by the poor crop in A
time. That factor should be borne in mind while giving advice fo
expansion of linseed.

Mr. B. C. Burt.—Perhaps we ought to give the basis on which arrived at 400,000 tons export. The United Kingdom for many years has averaged an import of over 300,000 tons of linseed. Last year it shown that our preference was sufficient to enable us to practically clude other linseed from the United Kingdom market. We have a 10 p cent. preference. There is also a fairly steady market on the contine and in America for Indian linseed for pale linseed oils. Then there is t internal consumption of at least 200,000 tons.

Chairman.—Now, we come to Part V (C) *Rape and mustard, sesamum and cotton seed.* On page 11 the Sub-Committee says: "So far as foreign exports were concerned the resolution referred to under A (*a*)—*Groundnut*—would cover the case of these oil seeds. The question of developing internal markets should be left to the Indian Oil Crushing Industry Committee of the Council." So, there is nothing definite at present about it and we had better leave them alone.

Part V (D) *Linseed, castor groundnut, rapeseed and sesamum oils.*—The Sub-Committee says: "Complaints had been made by merchants in Bombay that facilities for tank wagons on railways and tank accommodation on steamers and facilities for storage of these oils at the Indian seaport were lacking."

Mr. Tait.—When this question was brought up before the Sub-Committee, I said that it would be gone into. So far as the complaints regarding the tank wagons are concerned, I brought this matter to the notice of the Railway Board and it is now under their investigation. At the same time, it would be of assistance if Mr. Burt could let us have some indication as to what the extra amount of these oils would be for which tank wagons are required. If he could do so, it would help the matter materially.

Mr. B. C. Burt.—I can give those data later on and also the figures supplied by two merchants as to what they expect to do if these facilities re provided. The point which the Sub-Committee had in mind was that e should take advantage of the Ottawa Preference and export more roundnut oil to various Empire countries and the two merchants in ombay have given us their observations as to what they expect to be able do if they get these facilities. I will send them to Mr. Tait later.

Rao Bahadur C. Tadulinga Mudaliar.—May I know why the Safflower hich is very largely edible in the Tinnevelly and the Deccan districts t included in the list.

Sir T. Vijayaraghavacharya.—From an All-India point of view, it is y small crop.

hairman.—We now come to Part VI. *Sugarcane.* Is any member Conference who was not a member of the Sub-Committee desirous ining any information under this head?

P. B. Richards.—The danger of over-production of sugarcane was d in the Sub-Committee, and from the point of view of the largest g Province, one is naturally interested that there should not be

such an expansion of the sugarcane area in Provinces which previously have not been sugar producers, as to endanger the market Judging from the white sugar imports, it would appear that saturation point is rapidly being reached The difficulty which was instanced in the Sub Committee about making any specific recommendation was that we had no measure of the amount of gur which could be consumed at economic prices That must be admitted It is, however, to be hoped that the Sugar Committee will give their very careful consideration to the matter and endeavour to estimate as closely as possible the economic off take both in gur and in sugar, and, as a result of that possibly at some later date will be able to make recommendations to Provinces that they should be extremely cautious in stimulating the production of sugarcane lest the quantity produced should be more than India can consume

Chairman—We are producing only the quantity which we will our selves be able to consume

Mr P B Richards—That is the case at present, but I understand that the quantity of white sugar imported into India

Chairman—They may not make any more sugar than they required.

Mr P B Richards—But if cane is grown in excess of the requirements, then the bottom must drop out of the general cane or gur market

Chairman—If the unit be a province and if a province does not produce more sugar than it requires, then will you say that it should not produce even that much ?

Mr P B Richards—The sugar producing provinces of India are and apparently always have been the United Provinces and Bihar and Orissa We depend largely on our sugarcane It is but natural that we should view the problem first from the point of view of our own cultivators, and be perturbed when other Provinces express their intention of becoming self sufficing Should there be over production, it will equally hit the new producing provinces and reduce the value of the sugarcane crop everywhere

Chairman—That is perfectly true But the position you take up brings us very acutely to view the great principle underlying it, namely, that each province should be ear marked as especially fit for production of certain crops which it should grow and develop and that other provinces as far as possible should not trespass upon it if it can be helped

Mr P B Richards—The policy of self sufficiency seems to me to run counter to the fundamental idea for which this Conference was called which was for crop planning on an All India basis, and personally I greatly deplore the attitude that has been taken up I do not press for any restrictions I would only request that the position should be carefully watched in view of the future information as it becomes available

Chairman—I quite agree with you that these two principles are more or less incompatible

Rai Bahadur B B Mukharji—So far as Mr Richards' observations go, I feel that we cannot really accept the statement that one province and one province alone should grow a particular crop You are aware that in Bengal we have been rather hard hit by the absence of a money crop and,

jute having gone down, we are experimenting very seriously as to what its substitute should be. So far our experiments of sugarcane have been found to be satisfactory. Secondly, you are aware that the main crop of Bengal is *aman* paddy. It has been calculated that it does not take more than 92 days for a paddy cultivator to grow this crop and therefore the problem with which we are faced now is to find work for our widely extended cultivators who are not getting sufficient employment for the rest of the year and the sugarcane industry is a thing which we are aiming at. As regards the point that we have met here only for All-India planning, I am afraid I must protest with great respect against merely considering that. Provincial autonomy does not mean that we should be left to be guided in all our internal matters, even in the matter of the consumption of our foodstuffs and the growing of foodstuffs in the interests of somebody else. If I am quite fit to grow a crop at least to the extent of my home consumption, I must be permitted to grow that crop. I am perfectly prepared to go with my friend in all his helio-centric activities but I am afraid if I am rigidly restrained in details the fundamental basis on which the federation of autonomous provinces can develop will go.

Dr. W. Burns.—The position of Bombay with regard to the extension of the sugarcane is that up till the imposition of the import duty on sugar which has stimulated the production of sugar in India, the Deccan canals were largely dependent on sugarcane being produced and that question has been before the Bombay Government and has also been the subject of consideration by other bodies for a long time. Mr. Kamat here was on a committee which specially considered the position of the Deccan canals. Since the imposition of a tariff which has made it possible to develop sugar production in India, five more factories have sprung up in that area and there are now six where there was only one before and it is vital that there should be no restriction in the development of areas where factories may be set up. The supply of sugarcane to these factories is likely to increase. The increase, however, is not such as is likely to affect the general position because our area as compared with that of the United Provinces and Bihar and Orissa is comparatively small. At the moment the area under sugarcane is 67,000 acres, so that even if that were very largely increased, I do not think it would affect the general position in India. I merely wish to emphasize the position of Bombay with reference to its own sugar mills and the necessity of not restricting the supply of sugarcane.

Mr. D. R. Sethi.—I should like to state the position of Bihar. I endorse the remarks of Mr. Richards and I should only like to sound a note of warning to neighbouring provinces which are wanting to go ahead with sugarcane cultivation. It is for them to consider whether they can produce sugarcane as cheaply after the period of protection as we in Bihar and the United Provinces can do.

Rai Bahadur B. B. Mukharji.—You are aware, Sir, our country was formerly known as " Gour " because Bengal was the supplier of large quantities of gur to the rest of India, and there is obviously no reason why we should not go back to our " gur " status.

Mr. C. R. Pawsey.—As far as Assam is concerned, we have very large areas fit for sugarcane and applications for large areas for such

purposes are I believe going to be made and we should not like to be restrained

Chairman—There is no attempt under these few inoffensive lines to restrain anybody We shall pass on to Part VII—*Tobacco*

The Hon'ble Sir Frank Noyce—I wonder why the tobacco area is not responding more largely to prices Tobacco is the one crop the price of which has fallen less than in the case of any other crop One would have thought that in those circumstances it would have been substituted for other crops to a much larger extent than it has been

Mr B C Burt—Largely, I think, because of the amount of capital involved in tobacco cultivation compared with other crops and to lack of incentive to a larger turn over It is rather a specialised form of cultivation and without much propaganda by the Agricultural Department I do not think there would be any great incentive to increase Such a large proportion of our present production of tobacco is consumed mainly in the country that the future lies mainly with the home market This is a matter which the Sub Committee is going to consider

Chairman—The Sub Committee considered there was ample scope for expansion of the area under tobacco of the light type The bulk of the tobacco produced in India is consumed in India itself and it is heavy What India requires, it is said is to develop the light type of tobacco which is suitable for cigarettes Does that imply that the Committee would like India to consume cigarettes instead of the old conservative hookah ?

Mr B C Burt—What the Committee had in mind was that there were large imports of cigarettes and also large amounts of foreign tobacco for manufacturing into cigarettes We can profitably grow that for ourselves and we can also profitably export cigarette tobacco

Chairman—This is what I want figures of What is the quantity that you want to displace—and I presume that that is the quantity which is here described as affording ample scope ?

Mr B C Burt—I think the import of tobacco of the cigarette type comes to six million pounds per annum

The Hon'ble Sir Frank Noyce—How many acres would be required to grow that in India ? Can you give the average ?

Mr B C Burt—I do not think we can give that safely as the present averages relate to heavy tobacco The Committee will investigate it

Chairman—There is some light type produced ?

Mr B C Burt—Yes that is mentioned in the printed note on tobacco There has been a very marked increase in flue curing barns which are essential to the light type In the Guntur district in Madras it was eight hundred all during the last few years in the Saharanpur district of the United Provinces it was sixty, and something like fifteen in North Bihar

Chairman—One would like to have some information, however general it may be

Mr B C Burt—The immediate scope is the replacement of six million pounds of imported leaf and each province can calculate from its own yield

of the area. It would not be safe to give any figures at this stage because all these returns are on a quite different basis, of the leaf imported.

Rao Bahadur Narasimha Raju.—I calculate for the heavy type of tobacco about a thousand pounds per acre—from the experience of ryots in the Guntur district, and, if six million pounds were imported, I would say " a lakh of acres ".

Chairman.—Which are the light type tobacco-producing provinces ?

Rao Bahadur Narasimha Raju.—The Guntur district, for instance.

Dr. W. Burns.—Bombay has possibilities of becoming such.

Mr. K. McLean.—We are just starting light tobacco—most of the type now grown is heavy.

Mr. B. C. Burt.—There is also an important opening for exports. The United Kingdom imports about three hundred million pounds of the cigarette type from foreign sources of which we might easily get a reasonable share.

The Hon'ble Sir Frank Noyce.—The consumption of tobacco in India is also increasing—and of cigarettes ?

Mr. B. C. Burt.—Yes.

Chairman.—It can only be at the expense of the heavy type, because we all hope that the habit in India as a whole will not continue.

Dewan Bahadur T. Raghaviah.—There is scope for expansion of the tobacco cultivation ; so the new type of cultivation need not replace the existing heavy tobacco.

Chairman.—After all, it appears that so far as crop-planning is concerned, ten thousand acres or fifty thousand acres one way or the other are important but they won't make any very large difference. It is a very small crop.

Part VIII—*Fodder Crops. Dairy products.* What are they ?

Col. A. Olver.—All kinds of dairy products. Mainly liquid milk, butter and ghee, condensed milk, and infant foods of which large quantities are imported, but also condensed milk is sold to a considerable extent in canteens : not only is it used in the army but also by the civilian population. Villagers in Madras use considerable quantities.

Mr. A. McKerral.—Condensed milk is also very popular in Burma, which consumes very large quantities—about thirty lakhs.

Mr. H. M. Hood.—It would hardly do to put an import duty on the large quantities of milk and milk products that are being introduced into this country until the milk supply in the country is very much increased and improved. There is nothing to take its place in South India and it will take many years before the milk supply increases.

A member.—There is already a duty of 30 per cent. *ad valorem* ?

A member.—That is a duty for revenue purposes, not a protective duty.

The Hon'ble Sir Frank Noyce.—Surely it has a protective effect also ?

Col. A. Olver.—The duty at present is 25 per cent. of the tariff value, *viz.*, annas fourteen a pound of butter. This duty is, however, roughly

counterbalanced by the exchange position in New Zealand and Australia *vis-a-vis* this country. Moreover butter imported from Australia has an additional advantage in that a very substantial bonus, averaging 3.3*d.* per lb. during 1926—1933, is paid on every lb. of butter exported.

The Hon'ble Sir Frank Noyce.—That cannot last.

Col. A. Olver.—That is the position at the moment. We do not require a heavy duty at all. This country can produce butter fat to compete in the world market given proper organisation of the dairy industry. At the moment the market in the big coastal cities like Calcutta, Madras and Bombay is seriously affected by the exchange position, but the total value of the milk and dairy produce that comes into this country is less than a crore of rupees. The total value of the dairy produce consumed in the country, however amounts to 5 to 6 crores, so that the effect on the feeding of the people of a protective duty would be nil. On the other hand there is unlimited milk all over the country which could be marketed if the industry were properly organised. It is very largely a question of transportation to the markets through collecting centres and a proper marketing organization. There are a few instances of dairying organisations carrying on a profitable business within a certain limited area in the vicinity of mofussil towns, but the trouble is that the whole of this milk has to be produced within 10 or 15 miles radius. In a modern factory at Anand a private company is now producing large quantities of dairy produce on the latest principles and is able to sell tinned butter all over the country at 12 annas a pound.

The Hon'ble Sir Frank Noyce.—As against a price of 14 annas imported ?

Col. A. Olver.—Australian and New Zealand butter is now imported into Bombay at 10 annas a pound, c. i. f. not including duty.

Dr. D. B. Meek.—The average wholesale price last year was 14 annas a pound exclusive of duties, that is the tariff valuation.

Col. A. Olver.—There is also German butter coming in, but it is adulterated. This butter is being sold in Bombay to-day at 9 annas a pound but it is an adulterated product and the effect of that on the feeding of the people must be bad. There is one point I should like to mention here. We have definite evidence that if indigenous Indian cows are well fed and managed, it is not difficult to increase their milk production by 64 per cent. and that the cost per pound will fall steadily with the increase in yield. I will give one concrete example and that is the dairy at Muktesar. There, in a little over a year, the average milk yield has been raised from 8.7 to 14.6 lbs. per diem and the cost of production has fallen by 40 per cent. That is the kind of thing that can be done in this country with proper organisation. My view is that dairying should be developed in India not by trying to start big dairies entirely as a separate industry but by developing dairying in villages as a by-industry in conjunction with agriculture. We were given a good example of what could be done yesterday when we were told that the yield of cotton could be doubled by growing alternate crops of ground nut and I do not see why this could not be done in the case of dairy produce if fodder crops, particularly leguminous fodder crops were grown in conjunction with such crops as cotton and ground-nut, the cotton-seed and ground-

nut cake being fed to dairy cattle as concentrates. It then becomes a matter of organisation of collecting centres in order to bring the milk to the satisfactory markets.

Mr. H. M. Hood.—The whole of your argument is that a duty is unnecessary. May I ask whether that is actually your contention ?

Col. A. Olver.—No. My argument is this, that an import duty would mainly affect the big coastal cities such as Calcutta, Bombay and Madras which are the cream of the market. Elsewhere the industry could hold its own. What is required there is to reduce the heavy transportation charges to the cities and to prevent adulteration. If you want people to put money into dairying enterprise, they require security. They require security that the industry will be protected from what now amounts to dumping and from adulterated products. I have information that the present price of butter fat in New Zealand is not an economic price. Col. Matson who has made a special study of this subject for many years and who is now engaged in commercial dairying in New Zealand is my authority. The fact is that at present no one will be anxious to put money into up-to-date dairying unless there is some assurance of stability.

Chairman.—It is perfectly true, but at the same time it appears that the resolution as framed is not agreed to by all the members.

Some members : No.

Mr. A. McKerral.—The total All-India import of milk and milk products is of the value of 1.17 crores and of this Burma takes .47 crores or very nearly half. The Burmese people being Buddhists by religion do not, generally speaking, drink cow's milk nor consume the products of milk, but strange to say they have no objection to certain milk products and consume large quantities of imported condensed milk and milk products like Glaxo. The duty, if imposed, would, therefore be sure to meet with considerable opposition in Burma.

Chairman.—Does it matter to them where the condensed milk comes from. Would they refuse to take it if it did not come from Canada ? That will only mean that the Burmese on account of religious sentiment will not be able to benefit from this change.

Mr. A. McKerral.—That is so.

Dr. W. Burns.—Would Col. Olver tell us whether it would help the Indian produce if duties were imposed in advance of legislation to safeguard quality ?

Chairman.—That is exactly what I was going to say. The Resolution as passed if read a little carefully appears to be open to some criticism, while a great deal can be said for it. It says that this sub-committee recommends that a protective duty be levied upon all imports of dairy products which are or can be produced in this country. It does not say what the extent of that duty is. Government cannot possibly take action on this unless there was a regular impartial inquiry into the matter. At present Col. Olver has certain information which has no doubt been derived from a certain set of people. Other people may have information from the other side. What the Conference can reasonably expect Government to do is to make an inquiry into the matter through the usual agency of the Tariff Board. First we will have to see whether there is a case for

protection or not Is it worth while doing and if so what does it actually mean ? Does it mean a light duty or a heavy duty, and if so, for how long? Therefore if you simply ask us to impose a protective duty, it will not be really business like What it really amounts to is that it is a case for examination and no more If the Government gets the results of an impartial inquiry by the Tariff Board then they will be in a position to arrive at a decision If this view meets with the approval of the Conference then the recommendation can be modified easily to accord with that view What does Madras think ?

Mr H M Hood—I entirely agree with you

Rai Bahadur B B Mukherji—Yes

Chairman—Then shall we take it that this Resolution is passed ?

Mr A D Gorwala—Is it not necessary that there should be an infant industry to protect before we adopt such protective measures as are intended in this Resolution ? At present certain articles are not produced and yet the imposition of import duties on them is suggested

The Hon'ble Sir Frank Noyce—We propose that an enquiry should be made into the extent to which there is an industry

Chairman—Our industries are at present in the shape of butter producing industries We can modify the Resolution in this way —

"This Conference recommends that the question of protective duty on all imports of dairy products be examined by the Tariff Board "

Part IX—Fruits and vegetables (including roots)

Chairman—The sub committee has recommended —

"that at the present moment all the provinces are making special efforts to extend and improve these crops and consider that their efforts should be co ordinated more than they are now "

Sir T Vijayaraghavacharya—The point is that the Provinces want the Imperial Council of Agricultural Research to exercise a little more control We are giving grants to provinces for fruit research and they want us to bring all of them into line

Dr W Burns—In this case there is no question of over production From the statistics it appears that in Bombay only half an ounce of fruit vegetables are consumed per day per man whereas in New York it is one pound per day As far as the consumption of fruit and vegetables is concerned taken all together there is an enormous market It is only a quetsion of proper marketing facilities In the matter of export of fruit overseas all the provinces in India are likely to compete with one another In that direction we require co ordination and before any efforts are made to capture external markets I consider that the whole business should be done through one agency in India otherwise we shall land ourselves in hopeless muddle

Rao Bahadur Narasimha Raju—May I know what is meant by co ordination in marketing fruits Bombay and Karachi do stand in an advantageous position being nearer to European ports But the

eastern parts of India, the Madras coasts, are far away from European ports and on that account, they suffer in comparison with the western parts of India. What do you mean by co-ordination ?

Dr. W. Burns.—I shall explain. There is for example in Liverpool a possible market for bananas. Madras is producing bananas and it is now tempted to send them to northern India. If proper steps could be taken to send those bananas to European markets it will be good. Presumably her own market is over-flooded with bananas. What I suggest is that things like these should be exploited only by one agency acting for the whole of India, working, I presume, through the High Commissioner, rather than that individual provinces should make individual efforts.

Sir T. Vijayaraghavacharya.—The High Commissioner himself has written to me that there is unhealthy competition among Indian dealers as regards mangoes in the European market.

Rao Bahadur Narasimha Raju.—That is principally with regard to Bombay mangoes. I am making my own efforts to find a market for my mangoes. But I find it impossible to send mangoes from Madras. The railway freight is very heavy and there is unhealthy competition from mangoe growers in other parts of India. Even on the west coast, there is competition between Ratnagiri and some other place. If Dr. Burns wants co-ordination, let Bombay province first do some co-ordination within its own province. I believe there is no other province which competes with Bombay in sending mangoes to the Continent.

Dr. W. Burns.—The United Provinces Mango Growers Association is keen on sending mangoes to Europe.

Mr. H. M. Hood.—The question of bananas has been referred to. We grow enormous plantations of bananas in the south of the Madras Presidency, but the difficulty is to find a market for them. One of the chief difficulties is the difficulty of transport, and we have been trying to get concession rates and more suitable rolling stock and so on in carrying these plantains. Of course if we develop our own west coast port, we could put the bananas on board for export much more cheaply.

Chairman.—What is the extent of fruit farming in the different provinces ?

Mr. M. Vaidyanathan.—We have got statistics for fruits and vegetables combined in the Agricultural Statistics. They are 5 million acres during 1932-33 ; Burma comes first with 1.2 million acres, Madras .7, United Provinces .6, Bengal .8, Assam .4, Bombay .3, Punjab .3, Central Provinces .1 and the total is about 5 million acres for the whole of India.

Dewan Bahadur T. Raghaviah.—The idea of the sub-committee in making this recommendation was that there was want of a central organisation in regard to marketing of fruits and vegetables in India and outside and that there should be some agency set up by the Imperial Council of Agricultural Research or by Government which would act as a sort of clearing house and which would eliminate unhealthy competition and bring about co-ordination between the various provinces.

Chairman.—That will properly come under marketing and we will proceed to the next item.

Part X—*Cereals other than rice and wheat, specially barley, jowar, bajra, maize and gram (including pulses)*

Mr B C. Burt—At present barley, jowar, bajra and gram and a little maize are exported

Sardar Sampuran Singh—When I was last in London, I made enquiries as to what other articles of agricultural commodities except wheat and cotton could be conveniently exported to Europe I took with me samples of the various pulses that are imported into England from Mesopotamia and East Africa and on comparison I find that the qualities of pulses that we produce here are far superior to those imported from Mesopotamia and East Africa It is all a question of co ordination of marketing If proper enquiries are made, we could export a large quantity of these pluses to European market

Dr D B Meek—I have no objection to this recommendation of the sub committee We will examine it and see what could be done

The Conference agreed with the recommendation of the sub committee

The Conference then went on to page 12 of the Note, "General"

Chairman—We have decided what is in existence in the present scheme of crop planning and we have said that it should continue or at all events we have not advised curtailing the cropping as it exists at present The question now is what are the crops that we feel should be pushed, if any, and to what extent and by whom The Conference should arrive at definite conclusions on this and the question of alternative crops should be discussed

Madras

Rao Bahadur Narasimha Raju—I understand at present 50,000 tons of white sugar is being imported, and the acreage of 50 000 acres is expected to supply that imported sugar I do not think the idea is possible

Rao Bahadur D Ananda Rao—The area at present is 1,21 000 acres and I estimate another 50 000 acres will make us self supporting in regard to sugar as well as gur

Mr H. M Hood—The Madras Government has considered the recommendation made by this sub-committee but 50 000 acres here and 50,000 acres there is not going to make a big difference in the position of the paddy market when we have about 11½ million acres under paddy

Chairman—Every little thing helps the agriculturist

(*No comments on Madras*)

Bombay

Dr W Burns—I should explain that these crops here were suggested in connection with the question of substitution in rice areas

Mr A D Gorwala—Sind accepts that position

Burma

The Hon'ble Sir Frank Noyce—Can you grow linseed ?

Mr A McKerral—We tried it before in 1919 but under the existing conditions at that time it was not successful Conditions may be more favourable now and I mean to try it again next cold weather

Bihar and Orissa.

Chairman.—In view of the statements of Madras, Bengal, Burma and Assam, do you still intend to increase your sugarcane area ?

Mr. D. R. Sethi.—It is not a question of our intending to increase our sugarcane area. We have 30 factories in our province and the experience in the past year was that there was not enough sugarcane, at least in North Bihar, to feed these factories. Our forecast figures are never really very accurate, and if the factories want sugarcane the cultivators will automatically increase the area.

With your permission I should like to make a few modifications in this paragraph as it reads now. It should read as follows :—

> "Bihar and Orissa was hoping to show a further increase under sugarcane during the next few years. Its autumn rice in unprotected areas in Bihar proper was precarious and it was possible to replace some of this by more remunerative crops. If protection is afforded to the Indian dairy industry, the province had possibilities of growing fodder crops for which there is a great need."

The last two sentences should be combined into one and should read thus :—

> "There was also scope for the expansion of the acreage under linseed with efficient marketing."

I do not think there is any scope for the expansion of gram and other pulses in our province.

Central Provinces.

The Hon'ble Sir Frank Noyce.—What about increasing the acreage under cotton ?

Mr. J. H. Ritchie.—We produce as much cotton as we can and I do not think there is scope for much further expansion. Til (sesamum) seed we are also willing to expand in certain Districts and I am looking into the economics of its production.

Chairman.—The net result is that in cotton the definite recommendation is only for Madras to go on with 50,000 acres of Cambodia and in Sindh we should see their programme of expansion of cotton, rice and wheat. Besides Madras and Sind cotton does not seem to be a favourite. Sugarcane comes in for 300,000 to 400,000 acres in different provinces. Fruit is pursuing a good career of progress but there is no definite recommendation. Barley is to be taken up by the United Provinces and linseed is one definite crop which to the extent of 2 million acres could be pushed.

Mr. P. B. Richards.—The United Provinces also hopes to extend its production of sun-hemp.

Chairman.—Besides this there is an increase in tobacco of 30,000 acres.

There is no recommendation before us about fodder crops, but I am quite prepared to take up any recommendation that is made now.

Col A Olver—I think that not only in connection with the dairy industry but also in connection with the improvement of live stock all round there is a very big scope for fodder crops

Dr W Burns—This question is not contingent on the development of the milk industry It seems to me that it is very necessary at the present moment in order to develop the ordinary milk supply, which at the present moment is deficient both in quality and quantity

Chairman—What is the definite recommendation?

Col A Olver—That a considerable increase in the production of fodder crops should be made for the development of the dairy industry and of live stock

Dr W Burns—There is a definite opportunity in this

Rai Bahadur B B Mukharji—Would it be impossible for the Central Government or the Agricultural Research Council to supply up to date information to the provinces about machinery, methods of canning, and so forth? People in Bengal are struggling with very limited knowledge and it would be extremely helpful if we could have some sort of propaganda in this matter I found that in one place in Bengal milk was being sold at 32 seers per rupee whereas in Calcutta you could not get more than 3 seers per rupee There is a big difference between the price at the centre and the price outside

Chairman—You do not really suggest that at the place where milk was selling at 32 seers per rupee, it was not being used for producing ghee?

Rai Bahadur B B Mukharji—No, Sir But there is the difficulty of transport The Jumna and the Brahmaputra intervene and it is very difficult to get these things transported

Col A Olver—May I say that it is in that connection that we want a Dairy Institute? It is largely a question of processing and transport We do not know at present the best methods of marketing but there is any amount of milk available

Chairman—That is not a question which this Conference can help in deciding

Sir T Vijayaraghavacharya—It has been decided already

Col A Olver—The total area under cultivation of fodder crops at present is 5 per cent of the total cultivated area That is an extremely low proportion In England it is 35 per cent and there is ample rich grazing in addition There is great scope for expansion of fodder crops in India

Chairman—I should be glad to hear the views of provinces Are they prepared to treble the area under fodder crops?

Mr H M Hood—It is not possible for the Government of Madras to make any such definite undertaking They have no power to dictate what crops should be grown

Chairman—It is a provincial subject

Mr H M Hood—Yes But they have no authority to order that any particular crop should be grown

Chairman.—If you go to the Legislature and take the power ?

Mr. H. M. Hood.—There is very little prospect of any such legislation being passed. We are taking active steps by giving concessions to develop the area under fodder crops. The Madras Government are definitely attempting to foster the growth of fodder crops.

Rai Bahadur B. B. Mukharji.—It is possible to bring a much larger area under fodder crops cultivation in Bengal as a second crop. Action is being taken in that direction. It is one of the main duties of the Agricultural Department to carry on experiments and propaganda for growing fodder crops.

The Hon'ble Sir Miles Irving.—The Punjab Government would not be prepared to agree to any legislation by which the cultivator would be compelled to grow this crop or any other. I do not think it has been suggested in this Conference. The question of fodder crops involves the other question of superfluous and useless cattle. It may tend to increase the number of cattle which ought not to exist at all, or exist uneconomically.

Col. A. Olver.—In order to provide the number of bullocks which are required to cultivate the land, breeders at present have to produce an unduly large number of cattle. Many of these are inefficient and have no value whatever. If they were better fed, we would get better bullocks and a smaller number could do the work. That is the direction in which breeders will have to progress. It is of no use producing an inefficient animal because it can be cheaply reared if it is unable to do the work required.

The Hon'ble Sir Miles Irving.—I do not think there is any prospect of any increase in the fodder crops in the Punjab. We reduced the water rates some time ago. It had not the least effect on the growth of fodder. We had to increase them recently. We do not expect there will be any great reduction in the growth. We do not contemplate any great change in fodder crops.

Mr. J. H. Ritchie.—There is no prospect of any increase in fodder crops in the Central Provinces. Jowar is used as the main fodder in the cotton area, bhusa in the wheat tract and rice straw in the rice tract. Our Government farms produce berseem for our own cattle, but that practice has not been taken up by any one else and I see no prospect of any expansion.

Dr. W. Burns.—There are in Bombay 2½ million acres under fodder which is largely jowar and other crops that are grown and cut green. I think there are also great possibilities in pumping from rivers.

Mr. D. L. Drake-Brockman.—When we increase our area under linseed and sunayi it may be assumed that an increase in fodder grown specifically as such will have to be made. At the moment I see no need for any radical change.

Mr. A. McKerral.—In Burma, in the rice tracts cattle are fed with straw and in Upper Burma with jowar. In addition to these we have sesamum oil cake the produce of about 1½ million acres. On the irrigated areas fodder crops are not grown.

Mr. D. R. Sethi.—Sir, in Bihar, which is permanently settled, I do not think the Government can do very much to increase the area under fodder crops. We have about 33,000 acres under fodder at present, against a

total cattle population of about 29,000,000. They are fed on rice straw, wheat bhusa and gram, and I do not see that the cattle can be improved unless there is a definite incentive to the cultivator to grow fodder. It is very essential to have a market for Dairy products in order to improve the live-stock of the Province. A definite incentive should be given to the cultivator to grow fodder.

Chairman.—Do you suggest any incentive ?

Mr. D. R. Sethi.—It has been decided that the question of giving protection to dairy products should be referred to the Tariff Board. Protection, if given, will be a definite incentive.

Mr. C. R Pawsey.—At present there is no area at all under fodder, but the Agricultural Department will do what they can to improve the position. They are trying experimental farms to improve the standard of live stock.

Mr. A. D. Gorwala.—The development of fodder crops in the Barrage areas of Sind may be expected to take place naturally as former waste lands and grazing areas are taken up for cultivation. It will be impracticable to impose any condition on purchasers or lessees of land that a certain percentage of the area shall necessarily be grown with fodder crops. Attempts are being made to extend the cultivation of berseem (Egyptian clover) both as a fodder crop and as an agent in the reclamation of *kalar* lands.

Chairman.—It is really in canal areas where the least quantity of fodder is grown, unless special provision is made by the Colonisation authority.

Mr. A. D. Gorwala.—Our rates are much lower than for any other crop, but we cannot hope to introduce any legislation to say that it shall necessarily be cultivated.

The Hon'ble Sir Frank Noyce.—Can Mr. Burt tell us what the Royal Commission on Agriculture recommended on this subject ?

Mr. B. C. Burt.—I remember the Royal Commission saying that there was very little progress possible in cattle improvement or dairying unless the feeding of cattle is improved and that an increase in the growing of fodder crops must take place.

The Hon'ble Sir Frank Noyce.—The Royal Commission on Agriculture recommended in regard to this as follows : (The Honourable Member read from paragraph 187 of the Report). I do not think there has been any change in the position since. I should be very sorry if this Conference were to lend any support to the theory that a very great expansion of cultivation of fodder crops in this country is not desirable not only for the proper maintenance of live stock but also for the expansion of the dairy industry.

Chairman.—I think the Conference is agreed on that point that it is desirable. The question is how to bring about that desirable condition. It has been recognised by the provinces, but they have stated that they are powerless unless they are given legislative powers.

The Hon'ble Sir Frank Noyce.—I would not agree with that. There are a great many things that the Agricultural Department can do to encourage any particular crop. I do not believe our Agricultural Departments are so powerless as all that.

Mr. P. B. Richards.—We have in the United Provinces 1,360,000 acres under fodder crops against the normal area of 927,000 acres in 1905. That is an increase of roughly 40 per cent.

Chairman.—In the meantime the total crop area must also have gone up.

Mr. P. B. Richards.—The crop area has increased to 35,044,000 from 34,803,000 acres in 1905, that is to say, it has remained practically stationary. We have heard that it is desirable that alternative crops approximately of equal value should be substituted for wheat. This Conference has made no recommendations, and I do not know if it intends to advise Local Governments upon the ways and means by which the Government can assist in such substitution. Sir Miles Irving has touched briefly upon the possibility of such inducement : This might be of the nature of lower irrigation rates, revenue operations by way of generous takavi advances, generous remissions in the case of failures where new crops are being established, etc. If any lead can be given by this Conference in the manner in which the substitution of crops can be encouraged by Governments, I think it would be of great help to the Agricultural Departments.

Mr. H. M. Hood.—The matter has been carefully considered by the Madras Government before we came here in regard to the substitution of other crops for paddy and the compulsory restriction of cultivation.

Chairman.—There has been no question of restriction and the question of substitution has also been reduced to one of simply carrying out the programmes of such Local Governments as have any programmes of change over. The only other thing is the question of linseed. There is no other definite recommendation for introducing any other crop.

Mr. H. M. Hood.—Governments can do something towards inducing ryots to grow a particular crop, but they can not do it by compulsion. The methods referred to by Mr. Richards are open to the Governments, but I think the influence of those methods is not quite so great as he suggests. It is possible to give land revenue remissions, but Land Revenue is not by any means a very big factor in deciding what crops a ryot will grow. Government can refuse to give remission if a crop which is not favoured is grown but this may operate harshly. The method of persuasion and propaganda through the Agricultural or Revenue Department is open to us and it is the policy that is being steadily pursued at present in Madras.

Col. A. Olver.—The most effective propaganda is to organise good markets for animal products and live stock.

Chairman.—I take it that the result of such information as has been elicited from representatives of Local Governments is that there is a desire all round to help a larger area coming under fodder crops, but success achieved hitherto has not been very great, that none of the Local Governments is contemplating taking powers to further this object ; they all intend utilising such influence as they happen to possess to promote this object.

The Hon'ble Sir Miles Irving.—The policy of our Agricultural Department has been generally speaking not to advise any course of action but to lay before the cultivator facts to enable him to decide.

Chairman.—There is no more effective influence than to show by example.

The Hon'ble Sir Miles Irving.—We try to avoid giving definite advice saying " Grow this ".

Dr. W. Burns.—I protest that that is a most hopeless way of doing propaganda.

Chairman.—Propaganda, you must recognise, must vary with reference to the character of the people on whom it is being exercised. Sir Miles Irving can show that in matters relating to agriculture his province has not done so very badly as to justify that the method of propaganda is not very effective.

We come to page 13, where there is a general omnibus sort of resolution that in order to promote a more efficient production and marketing of Indian agricultural produce this Sub-Committee recommends that the Government of India should consider the advisability of imposing protective duties on the imports of agricultural produce which compete with home grown produce.

The Hon'ble Sir Frank Noyce.—The Government of India would want a great deal more information before they are prepared to take action on this Resolution. If you look at page 27 of the Statistical Table, you will find that there are only four agricultural imports, rice, which we have dealt with separately, coconut oil and linseed oil which are already subject to a high duty and cotton which is also subject to duty. A great proportion of the linseed oil is made from linseed which is exported from this country and which comes back to it again from the United Kingdom. There is also tobacco which has not been mentioned on which there is already a duty. I am not quite clear why other agricultural imports such as tobacco have not been mentioned, but tobacco is also subject to a high duty, and I think it is very desirable that the Sub-Committee should explain for the benefit of Government what imports of agricultural produce they had in mind. We have separately dealt with the question of the dairy industry, and it seems to me that the whole field has already been covered, and that this Resolution is superfluous.

Mr. P. B. Richards.—When this Resolution was finally passed the two words " animal fats " were added before agricultural produce. This was included lest animal fats should compete against home grown products. The Chairman has called this an omnibus resolution It is certainly an omnibus for the poor, the smaller agricultural industries and products. All the big things, more or less, have been provided for in separate resolutions, but there is a large number of smaller industries which may now or in the future require protection ; and therefore the resolution was framed in this manner. I will give a case in point from the United Provinces which applies throughout North India. We grow a large and increasing quantity of temperate fruits in the hills, of which the apple is the most important. These apples are sent all over India, Bombay and Calcutta being among the larger markets. It frequently happens that our growers in Kumaon Hills send apples of excellent quality to Bombay or Calcutta and find that they can not get the price of the box and the railway freight because of the dumping of apples from California. This is only a small case but there may be many more. We have merely asked in this Resolution that Government should take a favourable view of placing an import duty on such agricultural produce as competes in this way to the

disadvantage of local growers. It is not expected that a protective duty would be imposed on any article until those concerned have put their case before the Tariff Board, and all that is requested is a recommendation from this Committee to the Government of India that when such cases arise they will be given favourable consideration.

Chairman.—Then I can assure you it is superfluous, because as soon as an application comes to the Tariff Board, it is bound to be considered.

Mr. A. M. Livingstone.—With reference to Mr. Richards' last remark, when we dealt with fruits and vegetables there was no reference there to any question of import duties. So far as the United Kingdom is concerned, in regard to fruits and vegetables, the Import Duties Advisory Committee, put on some heavy duties with the object of encouraging the production of fruit and vegetables in England, which are at present being imported from the Continent, with a considerable amount of success, and the Dutch and French systems of market gardening have since extended considerably, but when the duties were put, on the Import Duties Advisory Committee was very specific in saying that unless the Home producers took steps to improve the marketing of their produce, these duties would be removed, and that incentive has caused the producers to go in for better marketing both of fruits and vegetables. It has been very helpful indeed, and I think the intention of the Sub-Committee was that similar action by the Tariff Board in India would also be helpful. It is true that in this country there are no Farmers' Unions to make proper representations to the Board, and I think Mr. Richards and the supporters of this resolution felt that in the absence of any such body in India a general resolution to this effect might perhaps be helpful without going into specific details.

Chairman.—As pointed out by my Hon'ble colleague, Government like any other businesslike body, would be glad to deal with any particular case. The general principle of this resolution is admitted by the Government as the very existence of the Tariff Board implies. But the point has been raised by Mr. Livingstone that there are no Farmers' Unions in this country but he is going to be the head of the Marketing Board, and I should think the Marketing Board of a province would be the most appropriate body to move in the matter of drawing attention of the Government to facts which justify an inquiry. I do not know whether members of the Conference are keen that a resolution in such general terms should be adopted. The discussion has taken place and that will serve the purpose. Is that a fairly accurate interpretation of the wishes of the Conference ?

Mr. H. M. Hood.—The resolution seems rather unnecessary.

Chairman.—That is what in a more parliamentary language I tried to say.

Well, now, we will proceed to the next one,—to improve agricultural statistics.

Dr. D. B. Meek.—A few years ago we addressed various Local Governments and commercial bodies regarding the possibility of re-starting the statistics relating to sea and rail-borne trade. The proposal was then accepted by the Provincial Governments and by representatives of commercial bodies. Now, I am in full sympathy with giving more information to provinces, but it will cost some money for the collection and

compilation of these figures in a much more detailed form If this resolution comes to the Government of India it will be examined but it will be examined mainly from the point of finance and I understand that some of the Local Governments will be willing to assist us financially One of the Local Governments has actually kept up the system of rail borne and trade statistics right from the year 1922 up to date I should like to know how far the Local Governments and commercial representatives would be willing to assist us in meeting the additional expenditure Central Provinces I understand has kept the statistics up to-date from 1922 onwards

Mr H M Hood—I cannot say whether our Government will or will not be willing to find the money

Dr D B Meek—If the resolution comes to me I will consult the Local Governments and indicate what the cost will be

Chairman—Gentlemen we have spent two mornings here and we have got through a very well considered Note by our experts from all over India It is a matter of very great satisfaction to me to see that in each province the Agricultural Department has been functioning with great zeal and enthusiasm and effect People were under the impression that cropping and all these things in the provinces have been going on anyhow there was no logic behind them that there was no sense behind them perhaps and at all events there were no economics behind them A reference to the proceedings of the Advisory Committee of experts and to all this extensive material that has been collected by the Council of Agricultural Research and our experts at the headquarters will show that for many years in the past provinces have been doing their very best to see that every acre of land is being used by the ryots and cultivators to as good a purpose as local conditions permitted After an exhaustive inquiry spreading over three days our experts came to the conclusion that as regards the cropping of the largest staple products rice and wheat they were not in a position to say that there was too much of cultivation Therefore the proceedings of this Conference and its conclusions will convince the public and the cultivator that as a matter of fact we are not in a position to say that the cultivation of these two large staple crops of the country should be restricted We are at the same time in a position, after examination of all the material to say that further expansion of these two crops can only be undertaken by provinces in the light of the facts which have been elicited during these investigations because we all know that circumstances and economic conditions change very rapidly and the changes of weather and rainfall and storms play a part which has a very important bearing on the development of cultivator s character and his faith in Providence Only the other day we heard what had happened in America when a storm came We thought that all their wheat was exhausted and perhaps India would once more be a wheat exporting country So we can never know that the existing conditions are going to continue for any length of time , but it is a matter of very great satisfaction to know that you have not been going very wrong It is a still greater satisfaction to know that in the main you have been doing very well

Then coming to substitute crops I think we have definitely scored a point in feeling satisfied that about 2 million more acres could be brought profitably under linseed About the other substitute crops they are not very much, but still our investigations our deliberations have been a

source of very great satisfaction to me and to my colleagues, and I trust they have been of equal satisfaction to representatives of provinces, because one does not like to feel that one has been bungling matters or mismanaging them although one would always like to improve matters if possible. There are some matters which have not yet been finally investigated. Provision has been made for investigations to be pursued in relation to those matters, and as soon as those investigations have been completed the results of those investigations will be circulated to all the provinces. These Conferences no doubt involve a great deal of trouble to provinces to send their representatives to them. But I feel after these two days' deliberations that we have been justified in giving this trouble to the provinces, in our own interests and I trust as well as in their interests. Therefore I will not apologise to you for giving you the trouble to come, for I feel that the gain on both sides has been such as to justify my giving the trouble and your being good enough to take the trouble to come. (Cheers.)

Rao Bahadur C. Tadulinga Mudaliar.—May I be permitted to express on behalf of this Conference our sincere feelings of thankfulness to the Vice-Chairman of the Imperial Council of Agricultural Research and his Statistician Professor Vaidyanathan for the trouble they have taken in placing before us these very interesting statistics and graphs. I have no doubt that they have been prepared by them at a certain amount of personal sacrifice, and I hope all the members of this Conference will agree with me in thanking them for the same.

Chairman.—Certainly.

Rao Bahadur C. Tadulinga Mudaliar.—May I also have the proud privilege this afternoon to express our feelings of gratitude to you, Sir, for the hearty welcome you have extended to us at the beginning of this Conference and the kind hospitality you have shown us during our stay at this hill station ? Also I may be permitted to propose a very sincere and hearty vote of thanks to you for so smoothly guiding the deliberations of this Conference and bringing it to a very successful end. (Cheers.)

The Conference then dispersed.

L77EHL—300—7-7-34—GIPS